TAMIL NADU ROAD DEVELOPMENT COMPANY LTD (TNRDC)

CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT FOR CONSTRUCTION OF HIGH LEVEL BRIDGES ACROSS PALAR RIVER AT KM: 76/000 IN EAST COAST ROAD IN TAMILNADU

REQUEST FOR PROPOSAL (RFP)

MARCH 2012

TNRDC

Tamil Nadu Road Development Company Ltd., Sindhur Panthion Plaza, 2nd Floor, 346, Pantheon road, Egmore, Chennai – 600 008 Phone : 044- 2819 4800, 044- 2819 4900 Fax : 91-44- 2819 5800

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SCHEDULE OF BIDDING PROCESS

S. No.	EVENT DESCRIPTION	DATE
1	ISSUE OF RFP TO APPLICANTS	From 02 nd March 2012
2	LAST DATE OF RECEIVING QUERIES, IN CASE THE QUERIES TO BE ANSWERED IN PRE-BID	09 TH March 2012
3	PRE-BID CONFERENCE	12 TH March 2012, 15.00 Hrs
4	LAST DATE OF PURCHASE OF RFP	20 TH March 2012
5	LAST DATE FOR SUBMISSION OF PROPOSALS	15:00 Hrs, 21 st March 2012
6	DATE FOR OPENING OF TECHNICAL PROPOSALS	15:30 Hrs, 21 st March 2012

TNRDC will endeavor to adhere to the dates indicated above. However, it reserves the right to effect changes to the above dates, if the need arises. Such change would be uploaded in TNRDC website (www.tnrdc.com)

DISCLAIMER

This Request for Proposal (RFP) is issued by Tamil Nadu Road Development Company Ltd (TNRDC)

The RFP is not a prospectus or offer or invitation to the public in relation to the sale of shares, debentures or securities, nor shall this RFP or any part of it form the basis of or be relied upon in any way in connection with, any contract relating to any shares, debentures or securities.

Whilst the information in this RFP has been prepared in good faith, it is not and does not purport to be comprehensive or to have been independently verified. Neither TNRDC, nor any of its officers or employees, nor any of their advisers nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of, or for any errors, omissions or misstatements, negligent or otherwise, relating to the proposed road Project, or make any representation or warranty, express or implied, with respect to the information contained in this RFP or on which this RFP is based or with respect to any written or oral information made or to be made available to any of the recipients or their professional advisers and, so far as permitted by law and except in the case of fraudulent misrepresentation by the party concerned, any liability therefore is hereby expressly disclaimed.

The information contained in this RFP is selective and is subject to updating, expansion, revision and amendment. It does not, and does not purport to, contain all the information that a recipient may require. Neither TNRDC nor any of its officers, employees nor any of its advisors nor consultants undertake to provide any recipient with access to any additional information or to update the information in this RFP or to correct any inaccuracies therein which may become apparent. Each recipient must conduct its own analysis of the information contained in this RFP or to correct any inaccuracies therein and is advised to carryout its own investigation into the proposed road Project, the legislative and regulatory regime which applies thereto and all matters pertinent to the proposed Project and to seek its own professional advice on the legal, financial, regulatory and taxation consequences of entering into any agreement or arrangement relating to the proposed Project.

This RFP includes certain statements, estimates, projections, targets and forecasts with respect to the road Project. Such statements estimates, projections, targets and forecasts reflect various assumptions made by the management, officers and employees of TNRDC, which assumptions (and the base information on which they are made) may or may not prove to be correct. No representation or warranty is given as to the reasonableness of forecasts or the assumptions on which they may be based and nothing in this RFP is, or should be relied on as, a promise, representation or warranty.

REQUEST FOR PROPOSAL (RFP) SECTION 1 INFORMATION TO CONSULTANTS

Sub.: CONSULTANCY SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT FOR CONSTRUCTION OF HIGH LEVEL BRIDGES ACROSS PALAR RIVER AT KM: 76/000 IN EAST COAST ROAD IN TAMILNADU GENERAL:-

Tamil Nadu Road Development Company Limited, (TNRDC) invites proposals for engaging Consultants on the basis of Competitive Bidding for the work of "**Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu**"

S. No	Location	Project Stretch	Completion Period
1	Tamil Nadu, India	Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu	3 months

TABLE 1: CONSTRUCTION OF HIGH LEVEL BRIDGES ACROSS PALAR RIVER

1. The proposal shall be submitted in English Language and all correspondence would be in the same language.

The existing ECR between Km 22/300 (Kudimiyandithopu) and Km 135/500 (up to Tamil Nadu State Border) is maintained as a Toll road by TNRDC. The main objective of the consultancy services is to propose a suitable alignment for the proposed High Level Bridge, propose the most suitable option, establish the technical viability of the project and prepare detailed project reports for the construction of high level bridges across palar river at Km: 76/000.

2. The Detailed Project Report would inter-alia include detailed design of bridges and cross drainage structures, quantities of various items (BoQ), detailed working drawings, detailed cost estimates.

TNRDC intends to appoint a Consultant for the preparation of Detailed Project Report (DPR) for Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu"

3. The interested Consultancy firms may obtain the RFP from TNRDC office from the address given below from **02ND MARCH 2012** To **20th MARCH 2012** on all working days between

10:00 hrs IST and 17:00 hrs IST by payment of non-refundable Demand Draft amounting to **Rs 10,000/-** (*Rupees Ten Thousand Only*) drawn in favour of "**Tamil Nadu Road Development Company Limited**" payable at any scheduled bank in Chennai. The RFP document is also available on TNRDC website (www.tnrdc.com). The Consultant who downloads the RFP document from the website will also be required to pay the non- refundable fee of **Rs 10,000/-** (*Rupees Ten Thousand Only*) at the time of the submission of the proposal. The proposal should be submitted by consultancy firm in two parts in two separate envelopes and put together in one single outer envelope. The two parts of the proposal are **Part 1**: Technical Proposal and **Part 2**: Financial Proposal. Stage-1 of the Evaluation shall consider the evaluation of the Technical Proposal (i.e. Part 1). The firms scoring the qualifying mark (minimum 70 marks) as mentioned in RFP shall be considered for further evaluation. The financial proposal of only those firms, who score qualifying marks in the Technical proposal would be opened and evaluated. The firm will be ranked on the basis of lowest amount quoted by them in <u>Appendix C-1</u>. The firm quoting the least amount will be invited by TNRDC for negotiation.

- 4. Any bid not accompanied by the acceptable Document price shall be rejected By TNRDC as non-responsive Tender
- 5. The total time period for the assignment as DPR Consultant will be for 3 months.
- 6. TNRDC will not be responsible for any delay, loss or non-receipt of RFP document sent by post/ courier. Further, TNRDC shall not be responsible for any delay in receiving the Proposal and reserves the right to accept/reject any or all applications without assigning any reason thereof.
- 7. The two parts of the Proposal (Technical proposal and Financial proposal) must be submitted in a hard bound form (hard bound implies binding between two covers through stitching or otherwise whereby it may not be possible to replace any paper without disturbing the documents. **Spiral bound form, loose form, etc. will not be accepted**) with all pages numbered serially, along with an index of submission. In the event, any of the instructions mentioned herein have not been adhered to, TNRDC may reject the Proposal.
- 8. RFP submission must be received not later than **15:00 hrs on 21ST MARCH 2012**, in the manner specified in the RFP document at the address given below:-

Vice President - Operations Tamil Nadu Road Development Company Ltd., Regd Office: Sindur Panthion Plaza, 2nd Floor, No:346, Pantheon Road, Egmore Chennai – 600 008, Tamil Nadu, India Phone: 91-44-2819 4800 / 4900 Fax: 91-44-2819 5800 Email : tenders@tnrdc.com, Website : www.tnrdc.com

- 9. Throughout this RFP Document, the term 'Employer', 'Client', 'TNRDC' and their derivatives are synonyms and shall carry same meaning, unless otherwise specified.
- 10. Throughout this RFP Document, the term 'Consultant/s' and their derivatives are synonyms and shall carry same meaning, unless otherwise specified.

Vice President - Operations Tamil Nadu Road Development Company Ltd Chennai – 600 008

SECTION 2 LETTER OF INVITATION TO CONSULTANTS

1 INTRODUCTION

- 1.1 TNRDC invites proposal for "Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu" required for the assignment named in the attached Letter of Invitation. This proposal could form the basis for future negotiations and ultimately a contract between selected firm and TNRDC.
- 1.2 A brief description of the assignment and its objectives are given in the Terms of Reference (ToR).
- 1.3 The assignment shall be implemented as per the Terms and Conditions stipulated in the RFP, TOR, Conditions of Contract and related documents.
- 1.4 To obtain first hand information on the assignment and on the local conditions, Bidders are encouraged to pay a visit to TNRDC / site before submitting a proposal and attend a Pre Bid Meeting as specified in the data sheet. The bidder or his official representative is invited to attend a Pre Bid meeting which will take place at the Employer's address on the date specified in Data Sheet and the minutes of the meeting will be conveyed to the bidders and will be uploaded in web portal. The minutes of the Pre Bid Meeting also forms part of this RFP Document. The Consultant must inform themselves of site conditions and take them into account in preparing the proposal.
- 1.5 Please note that, (i) the costs of preparing the proposal and negotiating for the contract, including a visit to site, are not reimbursable as a direct cost of assignment and (ii) TNRDC is not bound to accept any of the proposals received by it and reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Consultants.
- 1.6 Consultant has an obligation to disclose any situation of actual or potential conflict of interest that impacts their capacity to serve the best interest of TNRDC, which may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.
- 1.7 It is TNRDC's policy that the consultants observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, TNRDC:
- (a) Defines, for the purpose of this paragraph, the terms set forth below as follows:

- (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;
- (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;
- (iii) "collusive practices" means a scheme or arrangement between two or more consultants with or without the knowledge of the Client, designed to establish prices at artificial, noncompetitive levels;
- (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.
- (b) Will reject a proposal for award, if it determines that the Consultant recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive 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 a contract if at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a contract; and
- (d) Will have the right to require that, a provision be included requiring consultants to permit TNRDC to inspect their accounts and records relating to the performance of the contract and to have them audited by authorized representatives of TNRDC.
- 1.8 Consultants, their Sub-Consultants, and their associates shall not be under a declaration of ineligibility for corrupt and fraudulent practices. Furthermore, the Consultants shall be aware of the provisions on fraud and corruption stated in the specific clauses in the General Conditions of Contract.
- 1.9 Consultants shall furnish information on commissions and gratuities, if any, paid or to be paid to agents relating to this proposal and during execution of the assignment if the Consultant is awarded the Contract, in the Financial Proposal.
- 1.10 The Data Sheet indicates how long Consultants' Proposals must remain valid after the Submission date. During this period, Consultants shall maintain the availability of Professional staff nominated in the Proposal. TNRDC will make its best effort to complete negotiations within this period. Should the need arise; however, TNRDC may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants could submit new staff in replacement, who would be considered in the final evaluation for

contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals, without forfeiture of EMD.

2. CLARIFICATIONS AND AMENDMENT OF RFP DOCUMENTS

- 2.1 The interested Bidders may request a clarification of any of the RFP documents up to the number of days indicated in the Data Sheet before the Proposal submission date. Any request for clarification must be sent in writing by paper mail, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by paper mail, facsimile, or electronic mail to such requests and will send copies of the response (including an explanation of the query but without identifying the source of inquiry) to all interested Bidders who intend to submit proposals.
- 2.2 At any time before the submission of Proposals, TNRDC may for any reason, whether at its Own initiative or in response to a clarification requested by a Consulting firm, modify the RFP documents by amendment. Any amendment shall be issued in writing through addendum and shall form part of this RFP document. Addendum may be sent by mail, facsimile or electronic mail to interested Bidders or/and will be hosted on TNRDC website which will be binding on the bidders. It is the bidders (those who download from the website) responsibility to keep track of the website specified in the NIT 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 mail, facsimile or electronic mail to the Employer. TNRDC may at its discretion extend the deadline for the submission of Proposals.

3. PREPARATION OF PROPOSAL

3.1 Bidders are requested to submit their proposal in Two Parts using, (but not limited to) the formats enclosed herewith (refer section 3, 4 and 5) in 2 separate envelopes and put together in one single outer envelope. The two parts shall be:

Part 1: Technical Proposal and Part 2: Financial Proposal.

The proposal shall be written in the English language as specified in the Data Sheet. The 'ORIGINAL' proposal shall be submitted only by the Managing Director/ Head of the eligible consultancy firm. The Managing Director/Head of the eligible consultancy firm shall sign Appendix B-1 (Technical proposal submission form) and Appendix C-1 (Financial proposal submission form) as a minimal requirement and the rest of the pages of the Technical and Financial Proposal may be signed either by the Managing Director/Head of the eligible consultancy firm OR by an authorized representative holding proper Power of Attorney. The original Power of Attorney shall be executed by Managing Director/ Head of firm duly notarized and submitted with the proposal. In subsequent stages, any relevant submission by authorized representative shall be accepted.

- 3.1.1 Any entity which has been debarred, blacklisted by TNRDC, Govt of Tamil Nadu, any other State Government and their agencies and Central Government and their agencies and where the bar subsists as on the Proposal Due Date would not be eligible to submit the Proposal.
- 3.1.2 All witnesses and sureties shall be persons of status and probity and their full names, addresses and telephone numbers/mobile numbers shall be stated below their signatures. All signatures in the Proposal documents shall be dated.

3.1.3 **Proposal Preparation Cost**

The Bidder shall be responsible for all costs associated with the preparation of its Proposal including site visits and its participation in the bidding process. TNRDC will not be responsible nor in any way liable for such costs, regardless of the conduct or outcome of the bidding process.

3.1.4 Earnest Money Deposit (EMD)

The proposals duly filled in the required format must reach the Corporate Office of TNRDC, Egmore, Chennai – 600 008 on or before **15:00 hrs on 21ST MARCH 2012** along with EMD/ Bid Security for an amount of **Rs 50,000/-** (*Rupees Fifty Thousand Only*) in any one of the following forms:-

(i) Demand Draft drawn in favour of **Tamil Nadu Road Development Company Ltd.** (TNRDC)

(or)

(ii) Bank Guarantee from any Nationalised Indian Bank / Scheduled Bank as per the format given in the Bid document (Appendix B – 8). The Bank Guarantees issued as surety for the bid shall be valid for (28) Twenty Eight days beyond the validity of the bid.

The Earnest Money Deposit (EMD) should be enclosed along with Technical Proposal cover. Any bid not accompanied by the acceptable EMD shall be rejected By TNRDC as nonresponsive Tender.

Part 1: Technical Proposal

- 3.2 The bidder is expected to examine all terms and conditions included in the documents. Failure to act or to provide all requested information will be at his own risk and may result in rejection of his proposal.
- 3.3 During preparation of the Technical proposal the bidder may give particular attention to the following:

- i. The estimated man-months for the assignment which shall be the <u>minimum</u> as stated in the Terms of Reference for your information. The proposal shall however be evaluated on the number of professional staff months estimated by the Bidder.
- ii. For the purpose of interpretation, any ambiguity between Technical & Financial Bid, the details given in the later shall prevail and binding upon for arriving decision. The interested Bidders should prefer to field as many of their permanent staff as possible and marks shall be given in this regard. The permanent staff would be considered those already employed with the firm prior to the month during which this Tender Notice is issued. Please enclose evidence (e.g: Pay roll, Auditor's Certificate) in this regard.
- iii. No alternative to key professional staff may be proposed and only one Curriculum Vitae (CV) may be submitted for each position, and in the event of default, both the CVs shall be rejected.
- iv. A good working knowledge of the language specified in the data sheet is essential for key professional staff on this assignment. Reports must be in the language (s) specified in the data sheet.
- v. Higher weightage shall be given to the permanent Employees of the firm proposed for assignment
- vi. The staff proposed to be engaged for the period 2 Months and above should not be engaged for any other assignment. If this violation is detected, the concerned Staff will be disqualified and remuneration of such persons will be withheld.
- 3.4 Technical Proposal must provide the following information, using but not limited to the formats attached in the Section 3 & 4.

i. A brief description of the firm's organisation and an outline of recent experience of the Consultants on assignments of a similar nature (Preparation of DPR in High Level Bridge projects etc.). The information which shall be provided on each assignment should indicate, inter-alia, the profiles of the staff provided, duration, contract amount and firm's involvement.

- ii. Any comments or suggestions on the ToR and a description of the methodology (work plan) which the firm proposes to execute the services, illustrated with bar charts of Activities.
- iii. The composition of the proposed staff team, the tasks which shall be assigned to each and their timing;

- iv. **CVs signed not earlier than a month time, in blue ink** on each page by both the proposed professional staff and the Managing Director/Head of the bidding firms or the authorized representative. Key information should include years with the firm and degree of responsibility held in various assignments. As far as possible, all the CVs which are to be evaluated should be completed in all respects including signing by the concerned individual key personnel.
- v. Estimates of the total time effort (person x months) to be provided for the services, supported by bar chart diagrams showing the time proposed (person x months) for each Professional staff and sub professional staff.
- vi. EMD as per the details given in Para. No. 3.1.4 of Section 2 of RFP Document.
- vii. Any additional information.
- 3.5 The technical proposal must not include any financial information.

Part 2: Financial Proposal

- 3.6 Financial Proposal must be prepared using the formats attached in Section 5.
- 3.7 The Financial Proposal should clearly mention the Total cost including overheads, fees, profit, all taxes and duties (except Service Tax) levies.
- 3.8 Consultants shall express the price of their services in Indian Rupees only
- 3.9 Deleted
- 3.10 Service tax as applicable shall be reimbursed to the consultant, upon production of documentary proof of remittance

4. <u>SUBMISSION, RECEIPT AND OPENING OF PROPOSALS</u>

- 4.1 The 'ORIGINAL' proposal shall be prepared in indelible ink. It shall contain no inter-lineation or overwriting, except as necessary to correct errors made by the firm itself. Any such corrections must be initialed by the person or persons who sign(s) the Proposals.
- 4.2 All pages of the 'ORIGINAL' Proposal shall be signed by the eligible authority as specified in Para 3.1 of LOI given above.
- 4.3 Consultant must submit one 'ORIGINAL' proposal only. The financial proposal shall be sealed separately and duly marked on the envelope containing it showing the name of the project, the envelope must be clearly marked.

"DO NOT OPEN, EXCEPT IN PRESENCE OF THE TENDER SCRUTINY COMMITTEE"

- 4.4 This outer envelope shall include two separate envelopes, each clearly marked as "Part 1: Technical Proposal" or "Part 2: Financial Proposal".
- 4.5 The proposal must be submitted in a hard bound form (hard bound implies binding between two covers by stitching or otherwise whereby it may not be possible to replace any paper without disturbing the document spiral bound form, loose form, etc. will be not accepted) with all pages numbered serially, along with an index of submissions.
- 4.6 The completed proposal must be delivered on or before the time and date stated in the data sheet.

5 PROPOSAL EVALUATION

5.1 A two -stage procedure shall be adopted in evaluating the proposals:

Technical Proposal

5.2 The Tender Scrutiny Committee appointed by TNRDC shall carry out its evaluation applying the evaluation criteria and point system specified in the data sheet. Each responsive proposal shall be attributed a technical score (St.) The technical proposal should score at least 70 Marks to be considered responsive for Financial evaluation.

Financial Proposal

- 5.3 After the evaluation of Technical Proposals is completed, TNRDC shall notify the finally selected Consultants indicating the date and time set for opening of the Financial Proposals. TNRDC may notify those Consultants whose proposals were not considered as per conditions of RFP indicating that their Financial Proposal will be returned "unopened" along with the EMD
- 5.4 The Financial Proposals shall be opened in the presence of the Consultant's representatives who Choose to attend. The name of the Consultant, the technical scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. TNRDC shall not have any obligation to demonstrate to anybody on the Technical Evaluation process carried out.
- 5.5 The Tender Scrutiny Committee will determine whether the submitted Financial Proposals are complete i.e. whether they have included cost of all items of the corresponding proposals; if not, then the cost towards such missing items will be considered as NIL, but the Consultant shall, however, be required to carry out such obligations without any additional compensation. In case under such circumstances, if Client feels that the work cannot be carried out within the overall cost as per the submitted financial proposal, such proposals shall be considered non responsive.

5.6 Deleted

6 **NEGOTIATIONS**

- 6.1 Prior to the expiration period of validity of proposal, TNRDC shall notify the successful firm who submitted the lowest bid in writing by registered letter or facsimile and may either issue LOA, if negotiations are not required or may invite it to negotiate the contract price. In case two or more firms evaluated to be the lowest, the firm achieving the highest Technical score shall be invited first for negotiations.
- 6.2 Negotiations shall commence with a discussion of lowest bidder, the proposed methodology (work plan), staffing and any suggestions they may have made to improve the ToR. Agreement must then be reached on the final ToR, the staffing and bar charts, which shall indicate activities, staff, periods in the field and in the office, staff months, logistics and reporting. Special attention shall be paid to optimize the required outputs from the firm within the available budget and to define clearly the inputs required from the Employer to ensure satisfactory implementation of the assignment.
- 6.3 It is the responsibility of the Consultant, before starting financial negotiations, to contact the local tax authorities to determine the local tax amount to be paid by the Consultant under the Contract. The financial negotiations will include a clarification (if any) of the firm's tax liability, and the manner in which it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services.
- 6.4 Changes agreed upon shall then be reflected in the financial proposal, using quoted unit rates.
- 6.5 Having selected a firm, among other things, on the basis of an evaluation of proposed key professional staff, TNRDC expects to negotiate, a contract on the basis of the staff named in the proposal and, prior to contract negotiations, will require assurance that this staff shall be actually available. TNRDC shall not consider substitutions during contract negotiations except in cases of unexpected delays in the starting date or incapacity of key professional staff for reasons of health.
- 6.6 The negotiations shall be concluded with a review of the draft form of Contract. The Employer and the firm will finalise the contract to conclude negotiations.

7 AWARD OF CONTRACT

7.1 After completion of negotiations with the consultants, the Client shall award the Contract to the selected Consultant.

- 7.2 Within (7) Seven days from the date of issue of the Letter Of Award (LOA), the successful bidder shall accept the LOA and return the same to TNRDC along with valid performance security for a value of 5% of the Contract Value.
- 7.3 Deleted
- 7.4 The successful bidder shall execute the Consultancy Agreement within (15) Fifteen Days of acceptance of LOA
- 7.5 Commencement of Assignment: The firm shall begin carrying out the services from the date to be intimated by TNRDC

Vice President - Operations Tamil Nadu Road Development Company Ltd

DATA SHEET (As Mentioned in Information to Consultants)

Sub Clause No. in Information to Bidders

- 1.4 Pre-Bid Conference shall be held at: TNRDC Corporate Office on **12TH MARCH 2012 at 15:00 hrs**.
- 1.10 The proposal shall be valid for 120 days after the last date of submission.
- 2.1 Clarification may be requested up to 48 hrs prior to Date and Time fixed for receipt of bids. Bidders wanting to have their queries answered in Pre-Bid Conference should send their queries minimum 3 Days prior to Pre-Bid Conference. The address for requesting clarification is:

Vice President - Operations Tamil Nadu Road Development Company Ltd Regd Office: Sindur Panthion Plaza, 2nd Floor, No:346, Pantheon Road, Egmore Chennai – 600 008, Tamil Nadu, India Phone: 91-44-2819 4800 / 4900 Fax: 91-44-2819 5800 Email: <u>tenders@tnrdc.com</u> Web site: <u>www.tnrdc.com</u>

- 3.1 The Language of documents and correspondence will be English.
- 3.7 TNRDC shall reimburse only service tax. Consultant has to assess all other taxes and should inbuilt them in their financial proposal. These taxes (other than service tax) should not be provided separately. Consultants are requested to consult their Tax Consultants for details.
- 3.8 The Consultants to state the cost in INR only.
- 4.6 The time and date of submission: **15:00 hrs on 21ST MARCH 2012**. The Technical Bid will be opened at the same day at 15:30 hrs, in TNRDC Corporate Office.
- 5.2 The points assigned to Technical Evaluation criteria are enclosed as Appendix to this Data Sheet

SI.No	Description	Marks
Α	Relevant experience for the assignment	20
В	The quality of methodology and work plan proposed	10
С	Qualifications and competence of the key staff for the assignment	70
	Total	100

Appendix to Data Sheet

		2		Minimum	. .
SI No	Description of Item	Score		Qualifying Marks	Remarks
		10 years and above	4		
1	Year of Establishment	5 years and above	3.5	3	
I	of the firm	3 years and above	3	5	
		Max Marks	4	-	
		More than 10 Crores	4		
2	Average Annual Turn over (Last	5 to 10 Crores	3.5	3	
Z	3 years) from Consultancy Business	2.5 to 5 Crores	3	3	
	Business	Max Marks	4		
	Experience related to major bridges in Detailed Engineering Design / DPR Consultant of length more than 500 m in last 10 Financial years	5 or more Projects	8		
3		4 Projects	7	<u>^</u>	
		3 Projects	6.5	6	
		2 Projects	6		
		Max Marks	8		
	Experience related to	More than or equal to 4 Projects	4		
	Major Structures in DPR / Detailed Engineering	3 Projects	3.5		
4	Design (Major Structures are those having length of	2 Projects	3	3	
	more than 500 meter) other than major bridge during last 5 years	Max Marks	4		
B) The	Quality of Methodology	and Work Plan proposed			
		Understanding of the project, issues and proposed approach to solve them	2		
1	Quality of Approach	Approach for investigation, surveys, design and authentication of drawings	2	3	
	and Methodology	Proposed plan for the work, utility shifting method based on cost effective approach	2		
		Max Marks	6		
2	Comments and Suggestion on ToR	Max Marks	2	1	
		Optimization of manning schedule with respect to time and cost	1		
	Work Programme and Manning Schedule	Proposed work plan	1	1	
		Max Marks	2		

SI No	Description of Item	Score		Minimum Qualifying Marks	Remarks
		a) Educational Qualification:-			
		Post - Graduation in Structural Engineering	4		
		b) Professional Experience in Planning, project prep design of Bridge projects:	aration and		
		More than 20 years	4		
		More than or equal to 15 years	3		
1	Senior Bridge Engineer cum Team Leader	c) Involved in Project preparation and detailed design Bridge projects with more than 300m length in simila		11	
		More than or equal to 5 Projects	4		
		More than or equal to 6 Projects	5		
		More than or equal to 7 Projects	6		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	15		
		a) Educational Qualification:-			
		Post Graduation in Structural Engineering	3		
		Mere Graduation in Civil Engineering	2		
	Bridge Engineer	b) Professional Experience in Bridge projects in projects preparation and design of bridges	ect		
		More than 15 years	3		
•		More than 10 years	2.5	7	
2		c) Involvement in Project Preparation and Design of bridges of more than 300m length in similar capacity	major	7	
		More than or equal to 4 Projects	3		
		More than or equal to 2 Projects	2.5		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	10		
		a) Educational Qualification:-			
		Post Graduation inGeo-Technical Engineering	4		
		Mere Graduation in Civil Engineering / M.Sc Geology	3		
		b) Experience in similar type of works in infrastructur	e projects		
	Material Engineer cum	10 years and above	4	7	
	Geo-Technical Engineer	8 years and above	3	'	
		c) Involvement in Project Preparation in bridge projects in atleast one bridge of more than 300m length in similar capacity	1		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	10		

SI No	Description of Item	Score		Minimum Qualifying Marks	Remarks
		a) Educational Qualification:-			
		Graduation in Civil Engineering	3.5		
		Diploma in Civil / Survey Engineering	2.5		
		b) Experience in Highway projects involving Hig Bridges in project preparation and constuction	h Level		
	Senior	More than or equal to 10 Years	3.5		
4	Survey Engineer	More than or equal to 5 Years	2.5	6	
		 c) Involvement in project preparation in atleast one Bridge having length more than 300m in similar capacity 	1		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	9		
		a) Educational Qualification:-			
		Graduation in Civil Engineering	3.5		
		Diploma in Civil Engineering	2.5		
	Quantity Surveyor/Documentatio n Expert	 b) Professional experience in Highway Projects High Level Bridges in preparation of BoQ, contradocuments 			
5		More than or equal to 10 Years	3.5	6	
		More than or equal to 5 Years	2.5		
		 c) Involvement in atleast one major High Level Bridge projects having length more than 300m in similar capacity 	1		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	9		
		a) Educational Qualification:-			
		Post Graduation in Highway / Transportation Engineering	3.5		
		Mere Graduation in Civil Engineering	3		
		 b) Professional experience in Highway Projects High Level Bridges in project preparation 	invloving		
6	Highway	More than or equal to 10 Years	3.5	7	
5	Engineer	More than or equal to 5 Years	3	7	
		 c) Involvement in atleast 2 Highway projects involving major bridges in similar capacity 	1		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	9		

SI No	No Description of Item Score		Minimum Qualifying Marks	Remarks	
		a) Educational Qualification:-			
		Post Graduation in Environmental Science / Engineering	3		
	Environmental Specialist	b) Professional experience in Environmental & Social Impact Assessment for Highways & Bridge Projects			
		More than or equal to 10 Years	3		
7		More than or equal to 5 Years	2	6	
		c) Experience in atleast 1 High Level Bridge project having length more than 300m in similar capacity	1		
		Additional mark in the case of permanent employee of the firm, satisfying the criteria under Para No.3.3 (v) of Section - 2	1		
		Max Marks	8		

SL. No	Description	Marks
1	Maximum Marks	100
2	Minimum Marks for getting Technically qualified	70

7.5 Commencement of Assignment: The firm shall begin carrying out the services from the date to be intimated by TNRDC

SECTION 3 FORMATS FOR SUBMISSION OF FIRMS CREDENTIALS

The proposal should contain the following information in enclosed format attached in **Appendix A.**

Year of Establishment of Firm

Average annual turnover (last three financial years) from Consultancy Services.

S.No.	Particulars	2010-11	2009-10	2008-09
I	Annual turnover from Consulting Services			

APPENDIX A

The following information related to the firm should be provided in the proposal.

i.Name of the work: Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu

ii. Year of establishment of firm *

Consultant	Year of Establishment	Country	Type of Organization		
			Partnership	Company	Other

NOTE:-

*Copy of Certificate of incorporation shall be submitted.

- iii. Office/Business Address/Telephone nos. /Cable Address.
- iv. Narrative description of firm (Not more than 2 sheets)
- v. Name of two (2) principals who may be contacted with title and telephone number/fax number.
- vi. Financial Statement of the last three years. **

S.No.	Particulars	2010-11	2009-10	2008-09
I	Annual turnover from Consulting business			
li	Total Assets			
lii	Current Assets			

a) The amount shall be stated in INR.

- b) Audited balance Sheet/ Auditor Certificate of last 3 years (2008-09, 2009-10 & 2010-11) shall be submitted as evidence of Annual Turnover.
- vii. Experience as Detailed engineering Design / DPR Consultant of High Level Bridges (Minimum 500 m length) during last 10 years. * * *

S.	Projects Name /	Type of	Description	Client	Fee in INR	Approx.	Period
No	Year	Services	of High	(with	(Applicant's	cost of	
	Sole Consultant / Prime Consultant of Joint Venture / minor consultant of Joint Venture /	Rendered	Level Bridge Project (m)	complete address contact person, telephone Nos. and Fax Nos.)	share in case of Joint Venture)	High Level Bridge project	
1	2	3	4	5	6	7	8
A. 1. 2. 3.	Completed / Subs	tantially com	pleted projec	ts:	L		L

- *** a) Only those projects, to be included in the table which are major bridge Projects and for which clients certificates from the concerned authorities are enclosed with the proposal.
 - b) The details of bridges having length more than 500m in the listed projects is to be specifically mentioned.
 - c) **Joint venture proposals will not be entertained. However,** In case the firm is claiming experience for a project which is completed as Joint Venture, 75% credit shall be considered if it was the Lead Partner and 50% experience shall be considered if it is Joint Venture minor partner.

(viii) Experience as Detailed Engineering Design / DPR Consultant of major structures (Minimum 500 m length) during last 05 years. * * *

S.	Projects Name /	Type of	Description	Client	Fee in INR	Approx.	Period
No	Year	Services	of Major	(with	(Applicant's	cost of	
	Sole Consultant / Prime Consultant of Joint Venture / minor consultant of Joint Venture /	Rendered	structures (m)	complete address contact person, telephone Nos. and Fax Nos.)	share in case of Joint Venture)	case of structures Joint project	
1	2	3	4	5	6	7	8
Α.	Completed / Subs	tantially com	pleted projec	ts:			
1.							
2.							
3.							

- *** a) Only those projects, to be included in the table which are major structures and for which clients certificates from the concerned authorities are enclosed with the proposal.
 - b) The details of major structures having length more than 500m in the listed projects is to be specifically mentioned.
 - c) **Joint venture proposals will not be entertained. However,** In case the firm is claiming experience for a project which is completed as Joint Venture, 75% credit shall be considered if it was the Lead Partner and 50% experience shall be considered if it is Joint Venture minor partner.

SECTION 4

FORMAT FOR SUBMISSION OF TECHNICAL PROPOSAL

Appendix B-1	Technical proposal submission form.										
Appendix B-2	Firm's comments and suggestions on the Terms of Reference.										
Appendix B-3	Approach paper on methodology and work plan for performing the assignment.										
Appendix B-4	Composition of the Team and Task(s) of each Team Partner										
Appendix B-5	Curriculum vitae of proposed Professional staff.										
Appendix B-6	Time schedule for deployment of Professional staff										
Appendix B-7	Activity (works) schedule.										
Appendix B-8	Format for Bid Security										

APPENDIX B-1

Technical proposal submission form:-

TO:
Vice President - Operations
Tamil Nadu Road Development Company Ltd
Regd Office:
Sindur Panthion Plaza, 2 nd Floor,
No:346, Pantheon Road, Egmore
Chennai – 600 008, Tamil Nadu, India

Ladies/Gentlemen:

Subject: Submission of Technical and Financial Proposal for the work of "Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu"

We, the undersigned, offer to provide the consulting services for the above in accordance with your Request for Proposal dated (Date), We are hereby submitting our Proposal, which includes the Technical Proposal and Financial Proposal sealed in two separate envelope for the above mentioned work.

If negotiations are held during the period of validity of the Proposal i.e. before (Date) we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from contract negotiations.

We understand you are not bound to accept any Proposal you receive

We remain,

Yours sincerely,

Managing Director/Head of the firm Name of the firm Address

APPENDIX B-2 :

COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE (not more than one page):

1.
 2.
 3.
 .

4.

. . . .

APPENDIX B-3:

APPROACH PAPER ON METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

(Not more than six pages)

APPENDIX B-4:

COMPOSITION OF THE TEAM PERSONNEL, AND TASK(S) OF EACH TEAM MEMBER

1. Key Personnel

SI. No.	Name	Position	Task
1			
2			
3			
4			
5			
6			

APPENDIX B-5:

FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position :	Ph	otograph
Name of Firm :	····· [
Name of Staff :		
Profession :		
Date of Birth :		
Years with Firm/Entity: Nationality:		
Membership of Professional Societies:	l	
Detailed Task Assigned :		

Key Qualifications:

[Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use about half a page.]

Education:

[Summarise college/university and other specialised education of staff member, giving their names, dates attended, and degrees obtained. Use about one quarter of a page.]

Note:-

- a) Personnel is to affix his recent photograph on first page of CV.
- b) Complete address and phone number of the Personnel is to be provided.
- c) Document for proof of age is to be enclosed.
- d) Document for proof of qualification is to be enclosed.
- e) Age of the personnel shall not be more than 65 years.

Employment Record:

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, name of employing organisations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about three-quarters of a page.

Languages:

[For English language indicate proficiency : excellent, good, fair, or poor; in speaking, reading, and writing]

Certification by the Candidate

I, the undersigned, (Name and Address) certify that I have not left any assignment with the consultants engaged by GoTN/TNRDC for any continuing work of GoTN/ TNRDC without completing my assignment. I will be available for the entire duration of the current project (Detailed Project Report preparation for Construction of High Level Bridges Across Palar River At Km;76/000 In East Coast Road InTamil Nadu). If I leave this assignment in the middle of the completion of the work, TNRDC would be at liberty to debar me from taking any assignment in any of the TNRDC works for an appropriate period of time to be decided by TNRDC. I have no objection if my services are extended by TNRDC for this work in future.

.....

Date : (Day/Month/Year)

Certification by the firm

The undersigned on behalf of -------(name of consulting firm) certify that Shri ---------(name of the proposed personnel and address) to the best of our knowledge has not left his assignment with any other consulting firm engaged by GoTN /TNRDC for the ongoing projects. We understand that if the information about leaving the past assignment is known to TNRDC, TNRDC would be at liberty to remove the personnel from the present assignment and debar him for an appropriate period to be decided by TNRDC.

.....

Date : (Day/Month/Year)

[Signature of staff member or authorised representative of the Firm]

APPENDIX B-6:

TIME SCHEDULE FOR DEPLOYMENT OF PROFESSIONAL STAFF

A. Manning Schedule

SI. No	Name	Position	Wee	Week wise Program (in form of Bar Chart)											
			1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th week	Number of Week
1															Subtotal (1)
2															Subtotal (2)
3															Subtotal (3)
4															Subtotal (4)
-															-
-															-

APPENDIX B-7:

ACTIVITY (WORKS) SCHEDULE

A. Activity Schedule

		Week wise Program (in form of Bar Chart)											
SI. No.	Item of Activity (Works)	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th
1													
2													
3													
4													
-													
-													

B. Completion and submission of Reports

SI No:	Reports	Programme : (Date)
1	Inception Report, Engineering Survey & Investigation Report and Geo technical investigation & Sub soil exploration report	
2	Preliminary Report	
3	Draft DPR	
4	Final DPR	

APPENDIX B- 8:

FORMAT FOR BID SECURITY

EMD / BID SECURITY (To be issued by a Bank, as defined in this RFP)

То

Tamil Nadu Road Development Company Ltd., Sindhur Panthion Plaza, 2nd Floor, 346, Pantheon road, Egmore, Chennai – 600 008

- 1. In consideration of Tamil Nadu Road Development Company Ltd (hereinafter called "TNRDC" which expression shall include any entity which TNRDC may designate for the purpose) having agreed, inter alia, to consider the bid of [********] (hereinafter referred to as the "Bidder" which expression shall include their respective successors and assigns) which will be furnished in accordance with the terms of the Request for Proposals for Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu (hereinafter called the "RFP") in lieu of the Bidder being required to furnish EMD/ Bid Security, we [*****************] [name of the Bank and address of the issuing branch], hereinafter called the "Bank" which expression shall include our successors and assigns, as to bind ourselves our successors and assigns do at the instance of the Bidder hereby unconditionally and irrevocably undertake to pay as primary obligor and not as surety only to TNRDC without any demur protest or demand and without any proof or condition the sum of **Rs 50,000/-** (*Rupees Fifty Thousand Only*) as EMD / Bid Security
- 2. We, the Bank, do hereby unconditionally and irrevocably undertake to pay forthwith the amounts due and payable under this Guarantee without demur and on first demand and without any delay merely on a written demand from TNRDC or under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard, stating that the amount claimed is due by reason of the occurrence of any of the events referred to in the RFP. Any such demand made on the Bank by TNRDC under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, the Bank's liability under 'this Guarantee shall be restricted to an amount not exceeding **Rs 50,000/-** (*Rupees Fifty Thousand Only*). This Guarantee will remain in force for the period specified in paragraph 4 below and unless a demand or claim in writing is made by TNRDC on the Bank under this Guarantee, not later than **6 (six) months** from the date of expiry of this Guarantee, all rights of TNRDC under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

- 3. We, the Bank unconditionally undertake to pay to TNRDC any money so demanded under this Guarantee notwithstanding any dispute or disputes raised by the Bidder or any other party including in any suit or proceeding pending before any court or tribunal relating thereto or any instructions or purported instructions by the Bidder or any other party to the Bank not to pay or for any cause to withhold or defer payment to TNRDC under this Guarantee. The Bank's liability under this Guarantee is irrevocable, unconditional, absolute and unequivocal. The payment so made by the Bank under this Guarantee shall be a valid discharge of the bank's liability for payment hereunder and the Bidder shall have no claim against the Bank for making such payment.
- 4. We, the Bank further agree that the Guarantee herein contained shall remain in full force and effect upto and until 17:00 hours on the date which falls Twenty Eight **(28)** days beyond the Proposal Validity period (120 days after the last date of submission) i.e.(hereinafter called "the End Date"). Unless a demand or claim under this Guarantee is made on the Bank by TNRDC or under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard, in writing on or before the said End Date, the Bank shall be discharged from all liability under this Guarantee thereafter.
- 5. We hereby agree to renew and extend the validity of this guarantee for a period not exceeding one year from the End Date on a request made by TNRDC or under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard
- 6. We, the Bank further agree with TNRDC that TNRDC shall have the fullest liberty without the Bank's consent and without affecting in any manner the Bank's obligation hereunder to vary any of the terms and conditions of the RFP or to extend or postpone the time of performance by the Bidder or any other party from time to time or postpone for any time or from time or postpone for any time or from time to time any of the powers exercisable by TNRDC against the Bidder or any of them and to enforce or to forbear from enforcing any of the terms and conditions relating to the RFP and the Bank shall not be relieved from its liability by reason or any forbearance act or omission on the part of TNRDC, or any indulgence given by TNRDC to the Bidder or any other party or by any such matter or thing whatsoever which under the law relating to securities would, but for this provision, have the effect of so relieving the Bank.
- 7. To give full effect to the obligations herein contained, TNRDC shall be entitled to act against the Bank as primary obligor in respect of all claims subject of this Guarantee and it shall not be necessary for TNRDC to proceed against the Bidder or any other party before proceeding against the Bank under this Guarantee and the Guarantee herein contained shall be enforceable against the bank as principal obligor.

- 8. This Guarantee will not be discharged or affected in any way by the liquidation or winding up or dissolution or change of constitution or insolvency of any individual member of the Bidder or any other party or any change in the legal constitution or insolvency of the Bidder or any other party or any change in the legal constitution of the Bank or TNRDC.
- 9. We, the bank lastly undertake not to revoke this Guarantee during its currency.
- 10. Notwithstanding anything contained herein.
 - a) Our liability under the Bank Guarantee shall not exceed **Rs 50,000/-** (*Rupees Fifty Thousand Only*)
 - b) The Bank Guarantee shall be valid upto [date], 20_.
 - c) Unless a demand in writing is made <u>upon us</u> on or before _____, [date] or any other extended date, all our liability under this guarantee shall cease.

IN WITNESS WHEREOF THE BANK HAS SET ITS HANDS HERETO ON THE DAY, MONTH AND YEAR MENTIONED HEREUNDER.

Signed and Delivered On behalf of(Bank name)

(Signature) (Date)

by the hand of Mr (name of authorized signatory)

Designation

Note:

- a) Address of the controlling office of the issuing branch with phone number and fax number to be provided.
- b) Authenticated copy of Letter of Authority authorizing the signatory of this guarantee to execute the same to be enclosed herewith).

SECTION 5

FORMAT FOR SUBMISSION OF FINANCIAL PROPOSAL

- Appendix C-1 Financial proposal submission form
- Appendix C-2 Summary of costs
- Appendix C-3 Breakdown of costs

APPENDIX C-1 FINANCIAL PROPOSAL SUBMISSION FORM

FROM : (Name of Firm)	TO :
	Vice President - Operations
	Tamil Nadu Road Development Company Ltd
	Regd Office:
	Sindur Panthion Plaza, 2 nd Floor,
	No:346, Pantheon Road, Egmore
	Chennai – 600 008, Tamil Nadu, India
	Phone: 91-44-2819 4800 / 4900
	Fax: 91-44-2819 5800
	Email : <u>tenders@tnrdc.com</u>
	Website: <u>www.tnrdc.com</u>

Subject: Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu

We, the undersigned, offer to provide the DPR Consultancy Services for the above Project in accordance with your Request for Proposal dated [Date]. Our attached financial proposal is for a sum of Rs. [Amount in words and figures]. Our financial proposal is inclusive of all applicable taxes except applicable Service Tax, which will be reimbursed by you on production of proof of payment by us.

Our financial proposal shall be binding upon us subject to the modifications, if any resulting from any contract negotiations, up to the expiration of the validity period of the proposal, i.e., [Date].

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

Commission and gratuities, if any, paid or to be paid by us to agents relating to this proposal and contract execution, if we are awarded the contract, are listed below:

Name and Address of Agents

Amount and Purpose of Currency Gratuity

We understand and hereby confirm that you are not bound to accept any proposal you receive for the above.

We remain, Yours sincerely, Managing Director/Head of the firm * Name of the firm Address

APPENDIX C-2: SUMMARY OF COSTS

No.	Description	Amount in Rs.
I	Remuneration for Professional Staff	
II	Provision for Investigations and Engineering Surveys	
	Provision for Reports, Drawings, Travel, Office equipment, software and other relevant expenses as determined by the Consultant	
	Sub Total	
	Service Tax @ :	
	Grand Total	

Note: Payments will be made as per stipulations of the Conditions of Contract.

APPENDIX C-3 :

BREAKDOWN OF COSTS

I. Remuneration for Professional Staff

S No	Position	Name	Rate	No. of man- months	Amount
1	Senior Bridge Engineer cum Team leader			3	
2	Bridge Engineer			3	
3	Material-cum-Geo-technical Engineer			2	
4	Senior Survey Engineer			2	
5	Quantity Surveyor/Documentation Expert			2	
6	Highway Engineer			1	
7	Environmental Specialist			1	

Note : All necessary inputs of manpower such as sub professional staff, field technical staff, office staff other than the above as deemed necessary shall be provided by consultants within the quoted price to ensure that the entire work is completed in accordance with the TOR within stipulated time frame.

II. Provision for Investigations and Engineering Surveys

No	Name of the Work	Unit	Quantity	Rate	Amount
1	Topographic Survey	Km	03		
2	Inventory and condition survey	Km	03		
3	BBD for Pavement Evaluation	Km	02		
4	Sub grade Investigation	Nos	04		
5	Sub - Soil Investigations	Nos	05		
6	Utility Mapping	Km	03		
7	Baseline Survey for Environmental clearance	LS			
	Total				

Note: Adequacy of Investigations and Engineering Surveys required for the work shall be assessed by the Consultants

III. Provision for Reports, Drawings, Travel, Office equipment, software and other relevant expenses as determined by the Consultant

No	Name of the Work	Unit	Quantity	Rate	Amount
1	Provision for Reports, Drawings, Travel, Office equipment, software and other relevant expenses as determined by the Consultant	LS	01		
	Total				

SECTION 6:

TERMS OF REFERENCE

Terms of Reference for "Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu

1.General:

The existing ECR between Km 22/300 (Kudumiyandithopu) and Km 135/500 (up to Tamil Nadu State Border) is maintained as a Toll road by TNRDC. It is proposed to construct High Level Bridge across Palar river at Km:76/000 in place of the existing High Level Causeway.

It is now proposed to take up preparation of Detailed Project Report (DPR), for constructing High Level Bridge across Palar river through an external agency. The Government of Tamil Nadu has mandated TNRDC to take up the work.

2. Objective

- 2.1 The main objective of the consultancy service is to establish the technical and environmental viability of the project and to prepare detailed project reports for the construction of high level bridges including approaches at Km: 76/000 on Palar and to prepare bid / Tender document for construction.
- 2.2 The Detailed Project Report would inter-alia include Detailed Engineering Survey, alignment and GAD finalization, sub-soil investigation, detailed design for high level bridge(s) approaches, arrangement for disposal of Rain water cross drainage works, design of footpath, diversion roads if required, quantities of various items involved, detailed working drawings, detailed cost estimates, Environmental and Social Management Plan.
- 2.3 Various alignment options to be examined and the most suitable alignment to be suggested. The site plan with alignment proposal and GAD should be got approved from TNRDC.
- 2.4 Various options including
 - a) Construction of 4 lane high level bridge
 - b) Construction of 2 nos of 2 lane high level bridges
 - c) Construction of 1 additional 2 lane high level bridge and reconstruction of 2 lane high level bridge by dismantling the existing 2 lane high level carriageway to be examined and
 - d) Other better options, if any should be examined

and the most suitable option is to be suggested

2.5 Preparation of land plan schedule and structural valuation of affected buildings, obtaining estimates and demands shifting of service utilities involved, if any. The bid / tender documents should be as per the requirement of TNRDC.

3. Scope of Services

- 3.1 The general scope of services is given in the following sections. However, the entire scope of services would, inter-alia, include the items mentioned in the Letter of Invitation and the TOR.
- 3.2 All ready to implement 'good for construction' drawings shall be prepared.
- 3.3 Project preparation shall be primarily carried out in accordance with relevant IRC Codes, Specifications & Manual for Project Preparation of bridges and in consultation with respective TNRDC representative.
- 3.4 Conduct preliminary surveys in accordance with IRC & MoRTH.
- 3.5 An index plan showing the curves if any on the road alignment existing near the project area and straight alignment beyond, should be prepared and suggestions on the feasibility of improving the road alignment to form part of the project.
- 3.6 Suitable alignment feasible in a general way shall be selected keeping in view of the following:
 - The alignment should be taken into account all control points and should be shortest and most economical, compatible with requirements of gradient and curvature.
 - Every effort should be taken to remove the internal deficiencies with respect to plan and profile, required provisions, as well as drainage consideration, safety features etc. Various alignment options should be examined and the most suitable alignment to be suggested. On approval of the alignment by TNRDC, required field surveys, investigations are to be carried out.
- 3.7 Various options including
 - a) Construction of 4 lane high level bridge
 - b) Construction of 2 nos of 2 lane high level bridges
 - c) Construction of 1 additional 2 lane high level bridge and reconstruction of 2 lane high level bridge by dismantling the existing 2 lane high level carriageway to be examined and
 - d) Other better options, if any should be examined

and the most suitable option is to be suggested

- 3.8 The consultant has to perform detailed design for each of the component of the bridge, approaches, embankments, junctions etc, and prepare alignment plans, longitudinal sections and cross sections for the finalized option.
- 3.9 Consultant is also required to prepare all land acquisition papers, if required (ie all necessary schedule as per Tamil Nadu Highways Act 2001) for acquisition of land under Tamil Nadu Highways Act and also to prepare structural valuation for the structures involved in the land acquisition process as per PWD Norms /TNHA Act.
- 3.10 Conduct Environmental and Social Impact Assessment and shall assist in getting necessary Environmental Clearance.
- 3.11 The Consultant shall obtain all necessary clearances required for implementation of the project.

4. <u>Detailed Scope of Services:</u>

4. 1 Primary Task

SI.No	Description of Works
4.1.1	Primary Tasks
4.1.2	 i. Inventory and condition surveys for existing river bridge, bank training/ protection works. ii. Detailed Design of approach roads (extending at least up to approximately 1 km on each side of the bridge). iii. Detailed Design of Proposed additional Two lane Bridge and dismantling / reconstruction of existing Two lane bridge, cross drainage structures, other structures as required. iv. Preparation of GAD, construction drawings etc. v. Strip plan for bridge and approach road. vi. Design discharge and scour depth
	 a) Existing geological maps, catchments area maps, contour plans etc. for the project area b) Hydrological data, catchments area characteristics, river/channel characteristics, flood flow data and seismological data etc. c) Condition of existing river bank / protection works, if any. d) Sub surface and geotechnical data for existing nearby bridges. e) Detailed drawings of nearby existing bridges.
4.1.3	Reconnaissance and Alignment
	 a) The consultant should make an in depth study of available geological maps, catchments area maps, contour plans, flood flow data and seismological data. b) The primary tasks to be accomplished during the reconnaissance surveys also include: Typical physical features along the approach roads Possible bridge locations, land acquisition problems (if any), nature of crossings, likely length of approaches and bridge, firmness of banks, suitability of alignment of approach roads
4.1.4	Topographic surveys
	a) The detailed field surveys would essentially include the topographic surveys along the proposed location of bridge

	and alignment of approach road. b) The detailed topographic surveys should be carried out along the approach roads alignment and location of bridge approved by TNRDC.
4.1.5	Longitudinal and Cross sections
	Cross section of the channel at the site of proposed crossing and few cross sections at suitable distance both upstream and downstream, bed level up to top of banks and ground levels to a sufficient distance beyond the edges of channel, nature of existing surface soil in bed, banks & approaches, longitudinal section of channel showing site of bridge etc.
4.1.6	Hydraulic and Hydrological Investigations
	 a) The consultant shall also collect information on observed maximum depth of scour. b) History of hydraulic functioning of existing bridge, under flood situation, general direction of river course through structure, afflux, extent and magnitude of flood, effect of backwater, if any, aggradations/degradation of bed, evidence of scour etc. shall be used to augment the available hydrological data. The presence of flood control/irrigation structures, if affecting the hydraulic characteristics like causing obliquity, concentration of flow, scour, silting of bed, change in flow levels, bed levels etc. shall be studied and considered in design of bridges. The details of any future planned work that may affect the river hydraulics shall be studied and considered.
4.1.7	Geotechnical Investigations and Sub soil Exploration
	Investigation shall be carried out to determine the nature and properties of existing soil in bed, banks and approaches with trial pits and bore hole sections showing the levels, nature and properties of various strata to a sufficient depth below the level suitable for foundations, safe intensity of pressure on the foundation soil, proneness of site to artesian conditions, seismic disturbance and other engineering properties of soil etc.
4.1.8	General
	The consultants are also to carry out detailed designs and

	prepare working drawings for the followings ;
	 a) Design of pavement for approach road b) Design of river bank protection / training works in addition to the preparation of detailed design of high level bridge across palar river
4.1.9	Design of Bridges and Structures
	The data collected and investigation results shall be analysed
	to determine the following :
	i. HFL
	ii. LWL
	iii. LBL
	iv. Erodibility of bed/scour level
	v. Design discharge
	vi. Linear waterway and effective linear waterway
	vii. Likely foundation depth
	viii. Safe bearing capacity
	ix. Engineering properties of sub soil
	x. Artesian conditions
	xi. Settlement characteristics
	xii. Vertical clearance
	xiii. Horizontal clearance
	xiv. Free board for approach road
	xv. Severity of environment with reference to corrosion
	xvi. Data pertaining to seismic and wind load
	xvii. Requirement of model study etc.

4.2 While carrying out the field studies, investigations and design, the development plans being implemented or proposed for future implementation by the local bodies, should be taken into account. Such aspect should be clearly brought out in the reports and drawings.

4.3 Standards and Codes of Practices

- All activities related to field studies, design and documentation shall be done as per the latest guidelines/ circulars of MORTH and relevant publications of the Indian Roads Congress (IRC) and Bureau of Indian Standards (BIS). For aspects not covered by IRC and BIS, international standard practices, such as, British and American Standards may be adopted. The Consultants, upon award of the Contract, may finalise this in consultation with TNRDC and reflect the same in the inception report.
- 2. All notations, abbreviations and symbols used in the reports, documents and drawings shall be as per IRC:71-1977.

4.4 Quality Assurance Plan (QAP)

- 1. The Consultants should have detailed Quality Assurance Plan (QAP) for all field studies including topographic surveys, traffic surveys, engineering surveys and investigations, design and documentation activities. The quality assurance plans/procedures for different field studies, engineering surveys and investigation, design and documentation activities should be presented as separate sections like engineering surveys and investigations, traffic surveys, material geo-technical and sub-soil investigations, road and pavement investigations, investigation and design of bridges & structures, environment and R&R assessment, economic & financial analysis, drawings and documentation, preparation, checking, approval and filing of calculations, identification and tractability of project documents etc. Further, additional information as per format shall be furnished regarding the details of personnel who shall be responsible for carrying out/preparing and checking/verifying various activities forming part of project preparation, since inception to the completion of work. The detailed Draft QAP Document must be discussed and finalized with the concerned TNRDC officers immediately upon the award of the Contract and submitted as part of the inception report.
- 2. It is imperative that the QAP is approved by TNRDC before the Consultants start the field work.

4.5 Review of Data and Documents

- 1. The Consultants shall collect the available data and information relevant for the Study. The data and documents of major interest shall include, but not be limited to the following:
 - i. Climate;
 - ii. bridge condition, year of original construction, year and type of major maintenance/rehabilitation works;
 - iii. condition of bridges and cross-drainage structures;
 - iv. sub-surface and geo-technical data for existing bridges;
 - v. hydraulic data, drawings and details of existing bridges;
 - vi. survey and evaluation of locally available construction materials;
 - vii. historical data on classified traffic volume (preferably for 5 years or more)

4.6. Engineering Surveys and Investigations

4.6.1. Reconnaissance and Alignment

- 1. The Consultants should make an in-depth study of the available land width (ROW) topographic maps, satellite imageries and air photographs of the project area and other available relevant information collected by them concerning the existing alignment. Consultant himself has to arrange the required maps and the information needed by him from the potential sources. Consultant should make efforts for minimizing land acquisition. TNRDC will provide necessary authorisation letters to the concerned department for collecting the relevant information
- 2. The detailed ground reconnaissance may be taken up immediately after the study of maps and

other data. The primary tasks to be accomplished during the reconnaissance surveys include;

- i. topographical features of the area;
- ii. typical physical features along the existing alignment within and outside ROW i.e. land use pattern;
- iii. possible alignment alternatives, vis-a-vis, scheme for the construction of additional lanes parallel to the existing bridge;
- iv. realignment requirements including the provision of approaches with possible alignment alternatives;
- v. inventory of major aspects including land width, terrain, pavement type, carriageway type, bridges and structures (type, size and location), intersections (type, cross-road category, location) urban areas (location, extent), geologically sensitive areas, environmental features:
- vi. critical areas requiring detailed investigations; and,
- vii. requirements for carrying out supplementary investigations.
- viii. soil (textural classifications) and drainage conditions
- 3. The data derived from the reconnaissance surveys are normally utilised for planning and programming the detailed surveys and investigations. All field studies including the traffic surveys should be taken up on the basis of information derived from the reconnaissance surveys.
- 4. The data and information obtained from the reconnaissance surveys should be documented. The data analysis and the recommendations concerning alignment and the field studies should be included in the Inception Report. The data obtained from the reconnaissance surveys should form the core of the database which would be supplemented and augmented using the data obtained from detailed field studies and investigations.
- 5. The data obtained from the reconnaissance surveys should be compiled in the tabular as well as graphical (chart) form indicating the major physical features for TNRDC's comments. The data and the charts should also accompany the rationale for the selection of traffic survey stations.

4.6.2. Topographic Surveys

- 1. The basic objective of the topographic survey would be to capture the essential ground features along the alignment in order to consider improvements and for working out improvement. The detailed topographic surveys should normally be taken up after the completion of reconnaissance surveys.
- 2. The carrying out of topographic surveys will be one of the most important and crucial field tasks under the project. The detailed field surveys shall be carried out using high precision instruments i.e. Total stations. The data from the topographic surveys shall be available in (x, y, z) format for use in a sophisticated digital terrain model (DTM). The Consultants would be fully responsive for any inaccuracy in surveys.

3. The detailed field surveys would essentially include the following activities:

i. Topographic Surveys along the Existing Right of Way (ROW): Running a continuous open Traverse along the existing road and realignments, wherever required, and fixation of all cardinal points such as horizontal intersection points (HIP's), centre points and transit points etc. and properly referencing the same with a pair of reference pillars fixed on either side of the centre-line at safe places within the ROW.

ii. Collection of details for all features such as structures (bridges, culverts etc.) utilities, existing roads, electric and telephone installations (both O/H as well as underground), huts, buildings, fencing and trees (with girth greater than 0.3 metre) oil and gas lines etc. falling within the extent of survey.

4. The width of survey corridor will generally be as given under:

i. The width of the survey corridor should taken into account the layout of the existing alignment including the extent of embankment and cut slopes and the general ground profile. Normally the surveys should extend a minimum of 30 m beyond either side of the centre line of the proposed divided carriageway or land boundary whichever is more.

- 5. The surveyed alignment shall be transferred on to the ground as under:
 - i. Reference Pillar and Bench Mark / Reference pillar of size 30cm X 30 cm X 75 cm shall be cast in RCC of grade M 15 with a nail fixed in the centre of the top surface. The reference pillar shall be embedded in concrete upto a depth of 30 cm with CC M10 (5 cm wide all around). The portion above ground shall be painted yellow. The spacing shall be 250m apart. Incase Bench Mark Pillar coincides with Reference Pillar, only one of the two need be provided.
 - *ii.* Establishing Bench marks at site connected to GTS Bench marks at a interval of 250 metres on Bench mark pillar made of RCC as mentioned above with RL and BM No. marked on it with red paint.
- 6. The Consultant has to prepare the plan showing sites for proposed bridge. Suitable traffic diversion arrangement shall also be prepared by the Consultants .After obtaining the approval of suitable proposal and alignment and site plan from TNRDC authorities, further detailed survey shall be carried out.

4.6.2.1 Longitudinal and Cross-Sections for Bridges & Approaches

The topographic surveys for longitudinal and cross-sections shall cover the following:

i. Longitudinal section levels along final centre line at every 20 m interval, at the locations of

curve points, small streams, intersections and at the locations of change in elevation.

- ii. Cross sections at every 50 m interval in full extent of survey covering sufficient number of spot levels on existing carriageway and adjacent ground for profile correction course and earth work calculations. Cross sections shall be taken at closer interval at curves.
- iii. Longitudinal section for cross roads for length adequate for design and quantity estimation purposes.
- iv. Longitudinal and cross sections for major and minor streams as per recommendations contained in IRC Special Publication No. 13 (Guidelines for the Design of Small Bridges and Culverts) and IRC:5-1998 ("Standard Specifications & Code of Practice for Road Bridges, Section 1 - General Features of Design").

4.6.3 Investigations for Bridges and Structure 4.6.3.1 Hydraulic and Hydrological Investigations

- The hydrological and hydraulic studies shall be carried out in accordance with IRC Special Publication No. 13 ("Guidelines for the Design of Small Bridges and Culverts") and IRC:5-1998 ("Standard Specifications & Code of Practice for Road Bridges, Section I General Feature of Design"). These investigations shall also be carried out for all drainage structures along the approach road.
- 2. The Consultants shall make a desk study of available data on topography (topographic maps, stereoscopic aerial photography), storm duration, rainfall statistics, top soil characteristics, vegetation cover etc. so as to assess the catchment areas and hydraulic parameters for all existing and proposed drainage provisions. The findings of the desk study would be further supplemented and augmented by a reconnaissance along the area. All important hydrological features shall be noted during this field reconnaissance.
- 3. The Consultants shall collect information on high flood level (HFL), low water levels (LWL), discharge velocity etc. from available past records, local inquiries and visible signs, if any, on the structural components and embankments. Local inquiries shall also be made with regard to the road sections getting overtopped during heavy rains.
- 4. Hydraulic Data shall be got approved from concerned TNRDC authorities or any authorized agency/person before conducting Geo-technical Investigation and to decide location, depth of bore, etc.

4.6.3.2 Condition Surveys for Bridge Structures

 The Consultants shall thoroughly inspect the existing structures and shall prepare a report about their condition including all the parameters given in the Inspection pro-forma of IRC-SP; 35-1990. The condition and structural assessment survey of the bridges / culverts / structures shall be carried out by senior experts of the Consultants.

4.6.3.3 Geo-technical Investigations and Sub-Soil Exploration

 The Consultants shall carry out geo-technical investigations and sub-surface explorations for the proposed Bridges /viaducts etc., along high embankments and any other location as necessary for proper design of the works and conduct all relevant laboratory and field tests on soil and rock samples. The minimum scope of geo-technical investigations for bridge and structures shall be as under:

Carrying out detailed sub soil investigation with at least one bore hole at each foundation location for the proposed bridge and bore holes for the approaches to the bridge as per IRC 78-1983. Guidelines of design of high embankment and any instructions issued subsequently in this respect by MOST.

- 2. The deviation(s), if any, by the Consultants from the scheme presented above should be got approved by TNRDC
- 3. However, where a study of geo-technical reports and information available from adjacent crossings over the same waterway (existing highway bridges) indicates that subsurface variability is such that boring at the suggested spacing will be insufficient to adequately define the conditions for design purposes, the Consultants shall review and finalise the bore hole locations in consultation with the TNRDC representatives.
- 4. Sub-soil investigations shall be done as per IRC 78-2000.
- 5. The scheme for the borings locations and the depth of boring shall be prepared by the Consultants and submitted to TNRDC for approval. These may be finalised in consultation with TNRDC.
- 6. The sub-soil exploration and testing should be carried out through the reputed Geo-technical Consultants (as approved by TNRDC). The soil testing reports shall be in the format prescribed in relevant IRC Codes.

4.6.4. Material Investigations

- The Consultants shall identify sources (including use of fly-ash/ slag), quarry sites and borrow areas, undertake field and laboratory testing of the materials to determine their suitability for various components of the work and establish quality and quantity of various construction materials and recommend their use on the basis of techno-economic principles. The Consultants shall prepare mass haul diagram for haulage purposes giving quarry charts indicating the location of selected borrow areas, quarries and the respective estimated quantities.
- 2. It is to be ensured that no material shall be used from the right-of-way except by way of leveling the ground as required from the construction point of view, or for landscaping and planting of trees etc. or from the cutting of existing ground for obtaining the required formation levels.

- 3. Environmental restrictions, if any, and availability of these sites to prospective civil works contractors, should be duly taken into account while selecting new quarry locations.
- 4. The Consultants shall make suitable recommendations regarding making good the borrow and quarry areas after the exploitation of materials for construction of works.
- 5. The Material Investigation aspect shall include preparation and testing of bituminous mixes for various layers and concrete mixes of different design mix grades using suitable materials (binders, aggregates, sand filler etc.) as identified during Material Investigation to conform to latest MORT&H specification.

4.7 Detailed Design of Bridge Structures & Approaches.

4.7.1. General

1. The Consultants are to carryout detailed designs and prepare working drawings for the following

i. bridges and cross drainage structures wherever required etc.

ii. prepare alignment plans, longitudinal sections and cross-sections for bridge & approaches;

4.7.2. Design Standards

- 1. The Consultants shall evolve Design Standards and material specifications for the Study primarily based on IRC publications, MORTH Circulars and relevant recommendations of the international standards (American, Australian, British, Canadian, Japanese) for approval by TNRDC.
- 2. The Design Standards evolved for the project shall cover all aspects of detailed design including the design of geometric elements, pavement design, bridges and structures, traffic safety and materials.

4.7.3. Design of Bridges and Structures

1. The Consultant shall prepare General Arrangement Drawing (GAD) and Alignment Plan showing the salient features of the bridges and structures proposed to be constructed / reconstructed along the approach roads covered under the Study. These salient features such as alignment, overall length, span arrangement, cross section, deck level, founding level, type of bridge components (superstructure, substructure, foundations, bearings, expansion joint, return walls etc.) shall be finalized based upon hydraulic and geo-technical studies, cost effectiveness and ease of construction. The GAD shall be supplemented by Preliminary designs. In respect of span arrangement and type of bridge a few alternatives with cost-benefit implications should be submitted to enable TNRDC to approve the best alternative.

- 2. Subsequent to the approval of the GAD and Alignment Plan by TNRDC the Consultant shall prepare detailed design as per IRC guidelines and working drawings for all components of the bridges and structures. The Consultant shall furnish the design and working drawings for suitable protection works and/or river training works wherever required.
- 3. The Consultants shall also carry out the design and make suitable recommendations for protection works for bridges and drainage structures.
- 4. In case land available is not adequate for embankment slope, suitable design for RCC retaining wall shall be furnished. However, RE wall may also be considered depending upon techno-economic suitability to be approved by TNRDC.

4.7.4. Drainage System

- 1. The requirement of roadside drainage system and the integration of the same with proposed cross-drainage system shall be worked out for the entire length of the approach roads.
- 2. In addition to the roadside drainage system, the Consultants shall design the special drainage provisions for sections with super-elevated carriageways, high embankments and for road segments passing through cuts. The drainage provisions shall also be worked out for road segments passing through urban areas.
- 3. The designed drainage system should show locations of turnouts/outfall points with details of outfall structures fitting into natural contours.

4.8. Rerouting of utility lines

Consultants shall provide a list of utilities to be shifted, (overhead / underground) for execution of the project. Report for shifting/relocating each utility is to be furnished along with detailed cost of shifting as a separate item.

Concerned service departments/ service providers have to be consulted on this issue. The BoQ for this item shall be included and form part of main report.

4.9 Environmental And Social Impact Assessment

i) Objective

The Consultant shall prepare a detailed Environmental and Social Impact Assessment in accordance with the standards set by the Government of India / Government of TamilNadu / Pollution Control Board etc. The requirement of Coastal Regulation zone shall also be taken cognizance of.

The broad objectives of the study shall be as follows:-

1) Assess the impacts on environmental attributes due to proposed improvements and prepare an Environmental Impact Assessment (EIA) Report.

- Preparation of Environmental Mitigation Plan (EMP) recommending measures to minimize the environmental impacts due to the project and to keep unavoidable impacts to permissible levels.
- 3) To prepare cost estimation for implementing the Environmental plan.
- 4) Socio Economic Assessment

ii) Scope of Environmental Impact Assessment

The Environmental Impact due to the project, on either side of the road is to be assessed for a 100 m wide Corridor. The broad scope of the study is

- a) To conduct a review of the details available from various Government and private agencies and collect additional data relevant to the study area.
- b) To conduct Baseline study
- c) To assess the environmental impact due to construction and operation of the proposed improvement scheme.
- d) To prepare the environmental management plan outlining the measures to improve the environmental quality.
- e) To identify critical environmental attributes that are required to be monitored subsequent to the completion of the project.
- f) To obtain environmental clearance

iii) Study Approach

The studies may be organized in line with the guidelines stipulated by

- Ministry of Environment & Forests, Government of India for EIA
- Department of Environment & Forests, Government of TamilNadu
- Central and State Pollution Control Board.

The EIA shall cover the following attributes but shall not be limited only to the issues raised and shall include other issued deemed necessary.

- a) Land use
- b) Air Quality
- c) Noise
- d) Soil Characterizes
- e) Water quality
- f) Geology
- g) Hydrogeology
- h) Hydrology
- i) Ecology
- j) Erosion

iv) Construction / Operation phase impacts:

Impact during construction shall be thoroughly studied and shall include the following issues.

a) Impact due to the borrowing of huge quantity of earth for formation of road / embankment

- b) Impact due to the quarrying of sand in the river beds
- c) Impact due to the quarrying of metal
- d) Impact due to the cutting of trees
- e) Impact due to the forming the road over salt pans / back waters that are likely affect the aquatic flora and in turn the fauna.
- f) Impact due to the location and operation of Toll Plaza.
- g) Impact due to construction of additional structures in backwaters / streams etc
- h) Accident hazards and safety issues due to increase in traffic.
- i) Environmental impact due to construction of road side facilities such as Service Stations, Cafeteria and Parking facilities.
- j) Environmental impact due to solid waste like construction debris.

v) Environmental Mitigation Plan (EMP)

The Environmental mitigation measures needed for implementing the mitigation measures and conducting post project monitoring are also to be identified.

vi) The Socio Economic Assessment

The Social analysis study shall be carried out. The social analysis report will among other things, provide a socio economic profile of the project area and address in particular poverty alleviation, impact an local population, industry, agriculture, employment, health, education, land acquisition and resettlement.

The consultant shall prepare cost estimation for implementing the Rehabilitation plan.

All data collected by the consultant shall be commensurate with the requirement of various agencies such as MoE&F / GOI / GOTN / State Level Environment Impact Assessment Authority/ Pollution Control Board, including CRZ etc.

The consultant shall undertake any additional work to comply with the requirement of the agencies clearing the project.

Based on the detailed ESIA conducted by the DPR consultants, reports to be submitted for clearance shall be prepared and the consultant shall obtain the environmental clearance for execution of the project. The cost associated with getting the clearance shall also be included in the proposal.

4.10. Other Clearances:

Consultants shall obtain all types of necessary clearances required for implementation of the project on the ground from the concerned agencies like, Inland waterways authority, irrigation department, PWD, TNEB and any other concerned agencies as required. The client shall provide the necessary supporting letters to the concerned departments from whom the necessary clearances are being sought to enable implementation. The statutory payment, if any required for getting approval shall be made by the client. In case the consultant does not obtain all the necessary clearances upon completion of the assignment, deduction upto 5 % amount will be

made from the final payment. The amount thus deducted will be released after all necessary clearances have been obtained.

4.11. Proof Checking:

The consultants shall proof check their designs and drawings from reputed institutions like IIT, Anna University etc. The cost of this item shall also be included in the proposal.

4.12 Miscellaneous

The consultants shall prepare tender documents for contracts and shall assist in the finalization of tender documents and also assist TNRDC in finalizing tender. The consultant shall also assist on pre bid meetings and bidding process on technical issues including preparation of answers to the bidders queries, preparation of minutes of pre bid meeting etc. Finalization of Terms of References, estimate man-months and costing for engaging Project Management Consultants (PMC) for supervision of construction for the project if required.

4.13 Estimation of Quantities and Project Costs

- The Consultants shall prepare the Bill of quantities for the entire works of the project based on the working drawings. The Consultants shall prepare detailed estimates for quantities (considering designs and mass haul diagram) and project cost for the entire project. The estimation of quantities shall be based on detailed design of various components of the projects. The estimation of quantities and costs would have to be worked out separately as defined in this TOR.
- 2. While preparing BOQ the rates shall be based on the current Schedule of Rates (SoR) issued by PWD/ Highways Department. The consultants shall make detailed analysis for computing the unit rates for the different items of works, which are not covered in SOR of PWD/ Highways Department. The unit rate analysis shall duly take into account the various inputs and their basic rates, suggested location of plants and respective lead distances for mechanized construction. The unit rate for each item of works shall be worked out in terms of manpower, machinery and materials.

5. <u>Time period for the service</u>

- 5.1 Time period envisaged for the preparation of DPR is **03 months.** The final reports, drawings and documentation shall be completed within this time schedule.
- 5.2 TNRDC shall arrange to give approval on all sketches, drawings, reports and recommendations and other matters and proposals submitted for decision by the Consultant in such reasonable time so as not to delay or disrupt the performance of the Consultant's services.

6. Project Team and Project Office of the Consultant

- 6.1 The Consultants shall be required to form a multi-disciplinary team for this assignment. The consultants Team shall be manned by adequate number of experts with relevant experience in the execution of similar detailed design assignments.
- 6.2 List of suggested key personnel to be fielded by the consultant with appropriate man-month of each consultancy services is given in Enclosure I as per client's assessment.
- 6.3 Broad job-description and qualification of the key personnel is given in Enclosure II. The Consultant should feel free to submit their proposal on the basis of the man-months which they consider to be necessary to undertake the assignment. All the CV's of the personnel mentioned shall be evaluated at the time of evaluation of technical proposal as per the condition set forth in RFP. The age of the Key Personnel should not be more than 65 years on the date of submission of proposal. Consultants are advised in their own interest to frame the technical proposal in an objective manner as far as possible so that these could be properly assessed in respect of points to be given as part of evaluation criteria. The bio-data of the key personnel should be signed on every sheet by the personnel concerned and the last sheet of each bio-data should also be signed by the authorized signatory for the Consultant. The key personnel shall also certify at the end of their bio-data proforma that they have not left any of the TNRDC / GoTN works without completing of their assignment and have not accepted any other offer at the time of signing of the bio-data and as such shall be available to work with the Consultant, if the Project is awarded. In case the key personnel leaves the assignment without approval of TNRDC, TNRDC would be at liberty to take any appropriate action against that key personnel including debarment.
- 6.4 The Consultants shall establish an office at Chennai/ Pudhucherry manned by senior personnel during the period of assignment. All the project related office work shall be carried out by the consultant in their office unless there are special reasons for carrying out part of the office work elsewhere for which prior approval of TNRDC shall be obtained. The address of the office including the personnel manning it including their Telephone and FAX numbers will be intimated by the Consultant to TNRDC before commencement of the services.

7. Reports to be submitted by the Consultant to TNRDC

- 7.1 All reports, documents and drawings are to be submitted separately for each of the alternative alignment of proposed bridge. The analysis of data and the design proposals shall be based on the data derived from the primary surveys and investigations carried out during the period of assignment. The sources of data and model relationships used in the reports shall be indicated with complete details for easy reference.
- 7.2 Project preparation activities will be split into four stages as brought out below.

Stage 1: Inception Report, Engineering Survey and Investigation Reports

- Stage 2 : Preliminary Project Report (PPR)
- Stage 3 : Draft Detailed Project Report
- Stage 4 : Detailed Project Report (DPR)
- 7.3 Time schedule in respect of all such stages has been indicated in Enclosure-III of Appendix -II. Consultant shall be required to complete, to the satisfaction of the client, all the different stages of study within the time frame indicated in the schedule of submission pertaining to Reports and Documents for becoming eligible for payment for any part of the next stage.
- 7.4 The Consultant shall submit to the client the reports and after completion of each stage of work as per the schedule and in the number of copies as given in Enclosure- III. Further, the reports shall also be submitted in External Hard Disk/Pen drive and CD's in addition to the hard copies as mentioned in Enclosure-III. Consultant shall submit all other reports mentioned specifically in the preceding paras of the TOR.
 - 7.5 The time schedule for various submissions prescribed above shall be strictly adhered to. No time-over-run in respect of these submissions will normally be permitted. Consultant is advised to go through the entire terms of reference carefully and plan his work method in such a manner that various activities followed by respective submissions as brought out above are completed as stipulated. Consultant is, therefore, advised to deploy sufficient number of supporting personnel, both technical and administrative, to undertake the project preparation activities. The proposal should include complete information such as number of such persons, name, position, period of engagement, remuneration rate etc. The Consultant is also advised to start necessary survey works from the beginning so as to gain time in respect of various other activities in that stage.

8. Reports:-

STAGE 1 :

8.1. Inception Report, Engineering Survey and Investigation Reports

8.1.1 Inception report

The report shall cover the following major aspects:

- a) Project appreciation
- b) Programme for Data collection
- c) Key plan and Linear Plan
- d) Detailed methodology to meet the requirements of the TOR finalized
- e) Draft design standard
- f) Quality Assurance plan

The report shall contain the details of various options examined as detailed in para 2.4 and 3.7

and suggest most suitable, technically viable and economical options. The details of various alignment options as detailed in para 2.3 and 3.6 shall also be included in the report. The site plan with alignment and GAD should be got approved from TNRDC.

8.1.2 Quality Assurance Plan (QAP) Document

- a. Immediately upon the award, the Consultants shall submit four copies of the QAP document covering all aspects of field studies, investigations and design. The quality assurance plans/procedures for different field studies, engineering surveys and investigation, design and documentation activities should be presented as separate sections like engineering surveys and investigations, material geo-technical and sub-soil investigations, design of bridges & structures, drawings and documentation; preparation, checking, approval and filing of calculations, identification and tractability of project documents etc. Further, additional information as per format shall be furnished regarding the details of personal who shall be responsible for carrying out/preparing and checking/verifying various activities forming part of project preparation, since inception to the completion of work. The field and design activities shall start after the QAP is approved by TNRDC.
- b. The data formats proposed by the Consultants for use in field studies and investigations shall be submitted within 10 days after the commencement of services and got approved by TNRDC.

8.2 Engineering Survey and Investigation Reports

8.2.1 Engineering Survey & Investigations

Immediately upon the approval of QAP and data formats for field study and investigation and after finalizing the suitable alignment and design option for construction of high level bridge, the consultant shall start Engineering Survey and Investigations as detailed in 4.6.1 to 4.6.3.2 of TOR and submit the same to TNRDC for approval. The report shall be prepared for the bridge/CD Structure separately.

8.2.2 Geo-technical Investigations and Sub-Soil Exploration

Upon approval of hydraulic calculation and fixation of scour depth, sub-soil exploration shall be taken up as per 4.6.3.3 of TOR at the location and depth finalized with TNRDC authorities.

<u>STAGE: 2</u>

8.3 Preliminary Project Report- PPR

1. The PPR shall be prepared separately for each bridge/CD Structures and shall contain the following:

Volume – I: Preliminary Design Report

Executive summary Project description Conclusions and recommendations

Volume – II: Design Report Bridge inventory Survey and investigations data Proposed design basis, standards and specifications

Volume – III: Drawings Location map (Index Map) Layout plans with Approaches and diversion road (Site Plan) Longitudinal/Cross Sections of River/Nallah/Approach Road General Arrangement Drawings for bridge/cross-drainage, other structures and approaches Road junction designs Indicative land acquisition and utility shifting plans Typical Cross Section of Approach Road and Diversion road

<u>STAGE: 3</u>

8.4 Draft Detailed Project Report

- 8.4.1 The Draft DPR Submission shall consist of Main Report, Design Report, Materials Report, Engineering Report, Drainage Design Report, Land acquisition Report, Detailed Design, Drawing and cost Estimate of Bridge/CD Structures, Approach Road, Diversion Road and Utility Shifting etc.
- 8.4.2. The Report volumes shall be submitted as tabulated in Para below.

8.4.3. The Documents and Drawings shall be submitted for each bridge/CD Structures and shall be in the following format:

i. Volume-I, Main Report: This report will present the project background, details of surveys and investigations carried out, analysis and interpretation of survey and investigation data, traffic studies and demand forecasts, designs, drawings, cost estimation. The report shall include Executive Summary giving brief accounts of the findings of the study and recommendations.

The Report shall also include maps, charts and diagrams showing locations and details of existing features and the essential features of improvement.

The basic data obtained from the field studies and investigations and input data used for the preliminary design shall be submitted in a separate volume as an Appendix to Main Report.

- i. Volume II, Design Report: This volume shall contain design calculations, supported by computer printout of calculations wherever applicable. The Report shall clearly bring out the various features of design standards adopted for the study. The design report shall deal with the sub-soil exploration report including the complete details of boring done, analyses and interpretation of data and the selection of design parameters shall be included as an Appendix to the Design Report. The detailed design for all features should be carried out as per the requirements of the Design Standards for the project. However, there may be situations wherein it has not been possible to strictly adhere to the design standards due to the existing site conditions, restrictions and other considerations. The report should clearly bring out the details of these aspect and the standards adopted.
 - iii. Volume III, Materials Report: The Materials Report shall contain details concerning the proposed borrow areas and quarries for construction materials and possible sources of water for construction purposes. The report shall include details on locations of borrow areas and quarries shown on maps and charts and also the estimated quantities with mass haul diagram including possible end use with leads involved, the details of sampling and testing carried out and results in the form of important index values with possible end use thereof.

The materials Report shall also include details of sampling, testing and test results obtained in respect of physical properties of strata. The information shall be presented in tabular as well as in graphical representations and schematic diagrams. The Report shall present soil profiles along the alignment.

The material Report should also clearly indicate the locations of areas with problematic soils. Recommendations concerning the improvement of such soils for use in the proposed construction works, such as stabilisation (cement, lime, mechanical) should be included in the Report.

- iv. Volume IV, Technical Specifications: The MORT&H's Technical Specifications for Road and Bridge works shall be followed for this study. However, Volume - IV: Technical Specifications shall contain the special technical specifications which are not covered by MOST Specifications for Roads and Bridges (latest edition / revision) and also specific quality control norms for the construction of works.
- v. Volume V, Rate Analysis: This volume will present the analysis of rates for all items of works which are not covered by applicable SOR. The details of unit rate of materials at source, carriage charges, any other applicable charges, labour rates, machine charges as considered in arriving at unit rates will be included in this volume.
- vi. Volume VI, Cost Estimates : This volume will present the cost of each item of work as well as a summary of total cost.
- vii. Volume VII, Bill of Quantities : This volume shall contain the detailed Bill of Quantities for

all items of works.

- viii. **Volume -VIII**, **Drawing Volume** : All drawings forming part of this volume shall be 'good for construction' drawings. All plan and profile drawings will be prepared in suitable scale as approved by TNRDC. In addition this volume will contain 'good for construction' drawings for the following:
 - a. Horizontal Alignment and Longitudinal Profile.
 - b. Cross-section @ 20m interval along the alignment within ROW of approaches
 - c. Detailed Working Drawings for Cross-Drainage Structures.
 - d. Detailed Working Drawings for Bridges and Structures.
 - e. All drawings will be prepared in A2 size sheets.

The format for plan, cross-section and profile drawings shall be finalised in consultation with the concerned TNRDC officers. The drawings shall also include details of all BM and reference pillars, HIP and VIP. The co-ordinates of all points should be referenced to a common datum, preferably, GTS referencing system.

ix. **Volume-X, Project Clearances** – All the necessary(project related) clearances (such as from MOEF, Irrigation Department, PWD and any other concerned agencies) shall be obtained by the consultant and submitted to TNRDC so that project implementation can straight away proceed without any hold up.

Stage 4:

8.5. Final Detailed Project Report, Documents and Drawings (6 Sets)

On approval of Draft Detailed Project Report, the Final DPR consisting of Main Report, Design Report, Drainage Design Report and Materials Report, Engineering Report, Land acquisition plan, Detailed Design, Drawing and Cost Estimate of Bridge/CD Structure, approach road **Utility Shifting etc.** incorporating all revisions deemed relevant following receipt of the comments from TNRDC on the draft DPR shall be submitted in the volumes mentioned in 8.4 above.

9. Power point Presentation

Power Point presentations at least on 5 (five) occasions will have to made to various Officers of TNRDC / GoTN. The cost of making such presentation shall also be included in the proposal

10. Interaction with TNRDC

10.1. During entire period of services, the Consultant shall interact continuously with TNRDC authorities and provide any clarification as regards methods being followed and carry out modification as suggested by TNRDC. A programme of various activities shall be provided to TNRDC and prior intimation shall be given to TNRDC regarding start of key activities such as boring, survey etc. so that inspections of TNRDC officials could be arranged in time.

- 10.2 The TNRDC officers and other Government of Tamil Nadu officers may visit the site at any time, individually or collectively to acquaint themselves with the field investigation and survey works.
- 10.3. All equipment, software and books etc. required for satisfactory services for this project shall be obtained by the Consultant at their own cost and shall be their property.

11. Payment Schedule

11.1 The Consultant will be paid consultancy fee as a percentage of the contract value as per the schedule given below:

S.No.	Description	Payment	
1	On Submission of Inception Report, Engineering Survey	15%	
1	and Investigation Reports	1370	
2	On Submission of Preliminary Project Report	20%	
3	On submission of Draft Detailed Project Report and	20%	
3	Bidding Documents	2076	
4	On submission of Final Detailed Project Report and	30%	
4	Bidding Documents	5078	
5	On approval of Final Detailed Project Report	15%	
	Total	100%	

12. Data and Software

- 12.1 The Hard Disk/Pen Drive and CD's containing all basic as well as the processed data from all field studies and investigations, report, appendices, annexure, documents and drawings shall be submitted to TNRDC at the time of the submission of the Final Report. The data can be classified as follows:
 - i. Engineering Investigations and Traffic Studies: Material Investigation including test results for soils, Traffic Studies (traffic surveys), Sub-soil Exploration, Drainage Inventory, Inventory data for bridge and culverts in MS EXCEL or any other format which could be imported to widely used utility packages.
 - ii. **Topographic Surveys and Drawings** : All topographic data would be supplied in (x, y, z) format along with complete reference so that the data could be imported into any standard highway design software. The drawing files would be submitted in dxf or dwg format.
 - *iii.* **Rate Analysis** : The Consultant shall submit the rate analysis for various works items which are not covered under applicable SOR.
- 12.2 **Software**: The Consultant shall also hand-over to TNRDC CD's & hard disk/Pen Drive containing any general software which has been specifically developed for the project.

12.3 The Hard Disk/Pen Drive and CD's should be properly indexed and a catalogue giving contents of all Hard Disk/Pen Drive, CD's and print-outs of the contents (data from field studies topographic data and drawings) should be handed over to TNRDC at the time of submission of the Final Report.

13. Performance Security

The successful consulting firm shall have to submit a Bank Guarantee (BG) for an amount of 5% of the Contract Value within 07 days of issue of LOA. The BG shall be valid for a period of 09 months i.e. up to 06 months beyond the expiry of the Contract of 03 months. The BG shall be in the format specified in Appendix I of draft form of contract and furnished from any scheduled Commercial Bank.

14. Other Terms And Conditions

- The consultant shall maintain high standard of quality and accuracy in the work.
- The consultant shall submit a detailed work plan for the assignment.
- The consultant shall be responsible for accuracy of data collected, designs, drawings, estimates and all other details prepared by the firm as part of the services.

<u>Enclosure - I</u>
List of Key Personnel

S.No	Key Personnel	No.	Expected requirement (Month)
1	Senior Bridge Engineer cum Team leader	1	3
2	Bridge Engineer	1	3
3	Material-cum-Geo-technical Engineer	1	2
4	Senior Survey Engineer	1	2
5	Quantity Surveyor/Documentation Expert	1	2
6	Highway Engineer	1	1
7	Environmental Specialist	1	1

Enclosure-II Qualification and Experience Requirement of Key Personnel

1.Senior Bridge Engineer Cum Team Leader

i)	Educational Qualification	
	Essential	Post Graduate in Structural Engineering
ii)	Essential Experience	
	Experience a) Total Professional	Min. 20 years
	Experience	Will. 20 years
	b) Experience in Bridge project	Min. 15 years in Planning, project preparation and design of Bridge projects.
	c) Experience in similar capacity	Project preparation and detailed design of at least Five major Bridge projects with more than 300m length
iii)	Age Limit	65 years on the date of submission of proposal
2. E	ridge Engineer	
i)	Educational Qualification	
	a) Essential	Post graduate in Structural Engineering or Graduate in Civil Engineering
ii)	Essential Experience	
	a) Total Professional Experience	Min. 15 years
	b) Experience in Bridge projects	Min. 10 years in project preparation and design of bridge projects.
	c) Experience in	Project Preparation and Design of at least two major bridges of more than 300m
iii)	Age Limit	65 years on the date of submission of proposal
3.M	aterial Engineer – cum –	Geotechnical Engineer
i)	Educational Qualification	on
	Essential	Post Graduate in Geo – Technical Engineering or Graduate in Civil Engineering or M.Sc. Geology

ii)	Essential Experience a) Total Professional Experience	Min. 15 years			
	b) Experience in Similar type of work in infrastructure projects	Min. 8 years on projects of design and/or construction			
	c) Experience in Similar Capacity	Material cum Geo-technical Engineer in Bridge projects (NH/SH standards) in at least one bridge having length more than 300m			
iii)	Age Limit	65 years on the date of submission of proposal			
4.S	enior Survey Engineer				
i)	Educational				
	Qualification Essential	Graduate in Civil Engineering or Diploma in Civil Engineering or Diploma in Surveying			
ii)	Essential Experience				
	a) Total Professional Experience	Min.10 years			
	b) Experience in Highway and Bridge projects	Min. 5 years on Highway projects (NH/SH/standards) involving High Level Bridges in Project Preparation and construction & thorough understanding of modern computer based methods of surveying			
	c) Experience in Similar Capacity	Survey Engineer for projects preparation of bridges (NH/SH standards) in at least one bridge having length more than 300m.			
iii)	Age Limit	65 years on the date of submission of proposal			
5.Quantity Surveyor/Documentation Expert					
i)	Educational Qualification				
	Essential	Graduate in Civil Engineering / Diploma in Civil Engineering			
ii)	Essential Experience a) Total Professional Experience	Min. 15 years			
	b) Experience in Highway Projects involving High	Min. 5 years in Preparation of Estimates Bill of Quantities, Contract documents and documentation for highway/bridge			
	Level Bridges c) Experience in Similar	projects. Quantity Surveyor / Documentation Expert in Bridge projects			
	Capacity	(NH/SH standards) worked in at least one bridge having length more than 300m			
	iii) Age Limit	65 years on the date of submission of proposal			

6. Highway Engineer Educational Qualification i) Essential Post Graduate in Highway/ Transportation Engineering or Graduate in Civil Engineering ii) Essential Experience a) Total Professional Experience Min. 5 years b) Experience in Highway Projects Min. 5 years in Highway projects (NH/SH standards) involving High Level Bridges involving High Level Bridges in project preparation. c) Experience in Similar Capacity He should have experience in atleast 2 Highway projects involving major bridges iii) Age Limit 65 years on the date of submission of proposal **7.Environmental Specialist** i) Educational Qualification Post Graduate in Environmental Sciences / Engineering ii) Essential Experience a) Total Professional Experience Min. 8 years b) Experience in Highway/ bridge Projects Minimum 5 Years Experience in the Preparation of ESIA Reports for Highways / Bridge projects c) Experience in Similar Capacity He should have experience in atleast one High Level bridge Project having length more than 300m iii) Age Limit 65 years on the date of submission of proposal

Enclosure-III

Schedule for Submission of Reports and Documents

Submission Time w.e.f Date of Commencement of Consultancy Services (in days)

Stage No.	Activity	No. of copies	Time period	
	a. Inception Report, b. Engineering Survey &	3		
1.	Investigation Report		20 days	
1.	c. Geo-technical investigation			
	and sub-soil exploration report			
2.	Preliminary Project Report	3	30 days	
3.	Draft Detailed Project Report	3	60 days	
4.	Final Detailed Project Report	10	90 days	
	Submission and Project clearances from concerned	Original letters from		
5.		the concerned	90 days	
	agencies	agencies and 5 photocopies of each.		

Reports are to be submitted in one set in Hard Disk/Pen Drive and CDs along with required number of Hard copies as mentioned above.

SECTION 7:

DRAFT FORM OF CONTRACT

FOR

Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu

Between

(Name of Client)

And

(Name of Consultant)

Dated:

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- I DRAFT FORM OF CONTRACT
- **II GENERAL CONDITIONS OF CONTRACT**

III SPECIAL CONDITIONS OF CONTRACT

IV APPENDICES

Appendix A	:	Description of the Services
Appendix B	:	Reporting Requirements
Appendix C	:	Key Personnel and Sub-consultants
Appendix D	:	Deleted
Appendix E	:	Hours of Work for Key Personnel
Appendix F	:	Duties of the Client
Appendix G	:	Deleted
Appendix H	:	Cost Estimates
Appendix I	:	Form of Performance Bank Guarantee
Appendix J	:	Deleted
Appendix K	:	Letter of invitation
Appendix L	:	Letter of Award
Appendix M	:	Minutes of pre-bid meeting, Clarifications and Amendments

1. FORM OF CONTRACT

This CONTRACT (hereinafter called the "Contract") is made the ______ day of the Month of _____, 2012, between **M/s. Tamil Nadu Road Development Company Limited (TNRDC)**, a company incorporated under the Companies Act,1956 and having its Registered office at 2nd floor, Sindur Panthion plaza,346, Pantheon road, Egmore, Chennai – 600 008, Tamil Nadu, India (hereinafter called the "Client") which expression shall unless the context otherwise requires, include its successors and assigns of the one part and,

M/s ------, a company incorporated under ______ Act, and having its Registered office at ------ (hereinafter called the "Consultant") which expression shall unless the context otherwise requires, include its successors and assigns of the other part.

WHEREAS

(a) the Client has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services");

(b) the Consultants, having represented to the Client that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the parties hereto hereby agree as follows:

- 1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
 - (a) The General Conditions of Contract (hereinafter called "GC")'
 - (b) The Special Conditions of Contract (hereinafter called "SC");
 - (c) The following Appendices:

[Note: If any of these Appendices are not used, the words "Not Used" should be inserted below next to the title of the Appendix on the sheet attached hereto carrying the title of that Appendix].

Appendix A	:	Description of the Services
Appendix B	:	Reporting Requirements
Appendix C	:	Key Personnel and Sub-consultants

Appendix D	:	Deleted
Appendix E	:	Hours of Work for Key Personnel
Appendix F	:	Duties of the Client
Appendix G	:	Deleted
Appendix H	:	Cost Estimates
Appendix I	:	Form of Performance Bank Guarantee
Appendix J	:	Deleted
Appendix K	:	Letter of invitation
Appendix L	:	Letter of Award
Appendix-M	:	Minutes of pre-Bid Meeting, Clarifications and Amendments

2. The mutual rights and obligations of the Client and the Consultants shall be as set forth in the Contract; in particular

(a) The Consultants shall carry out the Services in accordance with the provisions of the Contract; and

(b) The Client shall make payments to the Consultants in accordance with the Provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

FOR AND ON BEHALF OF [NAME OF THE CLIENT]

By

(Authorized Representative)

FOR AND ON BEHALF OF [NAME OF THE CONSULTANTS]

By (Authorized Representative)

Witness:-

1.....

2.....

GENERAL CONDITIONS OF CONTRACT

1. General Provisions

1.1 **Definitions:-**

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) Applicable Law" means the laws and any other instruments having the force of law in the Government's country [or in such other country as may be specified in the Special Conditions of Contract (SC)], as they may be issued and in force from time to time.
- (b) "Contract means the Contract signed by the Parties, to which these General Conditions of Contract are attached, together with all the documents listed in Clause No 1 of Draft form of Contract which shall form part of signed Contract;
- (c) "Effective Date' means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1;
- (d)'foreign currency' means any currency other than the currency of the Government;
- (e) 'GC means these General Conditions of Contract;
- (f) "Government" means the GoTN
- (g) 'Local currency' means the Indian Rupees;
- (h) "Consultant" wherever mentioned in this Contract Agreement means the "DPR Consultant" and includes any sub-consultants or Associates engaged by the primary consultant.
- (i) Deleted
- (j) "Party' means the Client or the Consultants, as the case may be, and Parties means both of them;
- (k) "Personnel" means persons hired by the Consultants or by any Sub-Consultants and or Associates as Employees and assigned to the performance of the Services or any part thereof;
- (I) Deleted
- (m) "Services" means the work to be performed by the Consultants pursuant to this contract, as described in Appendix A hereto. The scope of work will be as given in

various Clauses in TOR. The approach and methodology to be adopted by the Consultant for carrying out the assignment as "DPR Consultant" may be modified depending on the site requirements and work programme of TNRDC after mutual discussions with TNRDC, The work plan as indicated by the Consultant may be modified according to the site requirements.

- (n) "Sub-consultants and or Associates " means any entity to which the Consultants subcontract any part of the Services in accordance with the provisions of Clause GC 3.7; and
- (o) "Third Party" means any person or entity other than the Government, the Client, the Consultants or a Sub-consultant.

1.2 Relation between the Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of principal and agent as between the Client and the Consultants. The Consultants, subject to this Contract, have complete charge of Personnel and Sub- consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.3 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law pursuant to GC1.1 (a).

1.4 Language

This Contract has been executed in the language specified in the SC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.5 Headings

The headings shall not limit, alter or affect the meaning of this Contract.

1.6 Notices

- 1.6.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telegram or facsimile to such Party at the address specified in the SC.
- 1.6.2 Notice will be deemed to be effective as specified in the SC.

1.6.3 A Party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the SC with respect to Clause GC 1.6.2.

1.7 Location

The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations whether in India or elsewhere, as the Client may approve.

1.8 Deleted

1.9 **Authorized Representatives**

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants may be taken or executed by the officials specified in the SC.

1.10 Taxes and Duties

Unless otherwise specified in the SC, the Consultants, Sub-Consultants and Personnel shall pay such taxes, duties, fees and other impositions as may be levied under the Applicable Law.

2. Commencement, Completion, Modification and Termination of Contract

2.1 Effectiveness of Contract

This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultants instructing the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

2.2 Termination of Contract for Failure to Become Effective

If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as shall be specified in the SC, either Party may, by not less than four (4) weeks' written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

2.3 **Commencement of Services**

The Consultants shall begin carrying out the Services when asked to do so by TNRDC.

2.4 **Expiration of Contract**

Unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire when services have been completed and all payments have been made at the end of such time period after the Effective Date as shall be specified in the SC.

2.4.1 Extension of Time

This is a time specific assignment. However, based on the request made by the Consultant, TNRDC may sanction EoT under exceptional circumstance at its sole discretion without any cost implications to TNRDC.

2.5 Entire Agreement

This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

2.6 **Modification**

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties as the case may be, pursuant to Clause GC 8.2 hereof; however, each Party shall give due consideration to any proposals for modification made by the other Party.

2.7 Force Majeure

2.7.1. **Definition**

- For the purposes of this Contract, "Force Majeure" means an event which is beyond (a) reasonable control of а Party, which the and makes а Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a party or such Party's Sub-consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably

have been expected to both (A) take into account at the time of the execution of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.

(c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

2.7.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care" and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

2.7.3 Measures to be taken

- (a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum delay.
- (b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any event not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- (c) The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

2.7.4 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.7.5 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to be reimbursed for additional costs as determined to be reasonable by TNRDC and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Services after the end of such period.

2.7.6 **Consultation**

Not later than thirty (30) days after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agree upon appropriate measures to be taken in the circumstances.

2.8. Suspension

The Client may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

2.9 **Termination**

2.9.1 By the Client

The Client may, by not less than thirty (30) days' written notice of termination to the Consultants (except in the event listed in paragraph (f) below, for which there shall be a written notice of not less than sixty (60) days), such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (h) of this Clause GC 2.9.1, terminate this Contract.

- (a) if the Consultants fail to remedy a failure in the performance of their obligations hereunder, as specified in a notice of suspension pursuant to Clause GC 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the Client may have subsequently approved in writing;
- (b) if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Partners becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- (c) if the Consultants fail to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof;
- (d) if the Consultants submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultants know to be false;

- (e) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (f) if the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- (g) if the consultant, in the judgment of the Client has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this clause:

"corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Client, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the Client of the benefits of free and open competition.

(h) Deleted

2.9.2 By the Consultants

The Consultants may, by not less than Sixty (60) days' written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause GC 2.9.2 terminate this Contract:

- (a) if the Client fails to pay any money due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 8 hereof within Sixty (60) days after receiving written notice from the Consultants that such payment is overdue;
- (b) if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within Sixty (60) days (or such longer period as the Consultants may have subsequently approved in writing) following the receipt by the Client of the Consultants' notice specifying such breach;
- (c) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (d) if the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.

2.9.3. Cessation of Rights and Obligations

Upon termination of this Contract pursuant to Clauses GC 2.2 or GC 2.9 hereof, or upon expiration of this Contract pursuant to Clause GC 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except:

- (i) Such rights and obligations as may have accrued on the date of termination or expiration;
- (ii) the obligation of confidentiality set forth in Clause GC 3.3 hereof;
- (iii) the Consultants' obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GC 3.6 (ii) hereof; and
- (iv) any right which a Party may have under the Applicable Law

2.9.4 **Cessation of Services**

Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.9.1 or GC 2.9.2 hereof, the Consultants shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants and equipment and materials furnished by the Client, the Consultants shall proceed as provided, respectively, by Clauses GC 3.9 or GC 3.10 hereof.

2.9.5 **Payment upon Termination**

Upon termination of this Contract pursuant to Clauses GC 2.9.1 or GC 2.9.2 hereof, the Client shall make the following payments to the Consultants (after offsetting against these payments any amount that may be due from the Consultant to the Client):

- (a) remuneration pursuant to Clause GC 6 hereof for Services satisfactorily performed prior to the effective date of termination;
- (b) reimbursable expenditures pursuant to Clause GC 6 hereof for expenditures actually incurred prior to the effective date of termination; and
- (c) except in the case of termination pursuant to paragraphs (a) through (d) of Clause GC 2.9.1 hereof, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract including the cost of the return travel of the Consultants' personnel and their eligible dependents.

2.9.6. **Disputes about Events of Termination**

If either Party disputes whether an event specified in paragraphs (a) through (e) of Clause GC 2.9.1 or in Clause GC 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause GC 8 hereof.

3. **Obligation of the Consultants**

3.1 General

3.1.1. Standard of Performance

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe & effective equipment, machinery, materials and methods" The Consultants shall always" act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the TNRDC, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-consultants or Third Parties.

3.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub- consultants and or Associates, as well as the Personnel of the Consultants and any Sub- consultants and or Associates, comply with the Applicable Law.

3.2 **Conflict of Interests**

3.2.1 Consultants Not to Benefit from Commissions, Discounts, etc.

The Remuneration of the Consultants pursuant to Clause GC 6 hereof shall constitute the Consultants' sole remuneration in connection with this Contract or the Services and, subject to Clause GC 3.2.2 hereof, the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Consultants shall use their best efforts to ensure that any Sub- consultants and or Associates, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

3.2.2 If the Consultants, as a part of the Services, have the responsibility of advising the Client on the procurement of goods, works or services, the Consultants shall

comply with any applicable procurement guidelines of TNRDC and or Associates Bank or of the Association, as the case may be, and other funding agencies and shall at all times exercise such responsibility in the best interest of the Client. Any discounts or commissions obtained by the Consultants in the exercise of such procurement responsibility shall be for the account of the Client.

3.2.3 Consultants and Affiliates not to engage in Certain Activities

The Consultants agree that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultants, as well as any Sub- consultant and or Associates and any entity affiliated with such Sub- consultant and or Associates, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

3.2.4 **Prohibition of Conflicting Activities**

The Consultants shall not engage, and shall cause their Personnel as well as their Sub- consultants and or Associates and their Personnel not to engage, either directly or indirectly, in any of the following activities:

(a) during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract; and

(b) after the termination of this Contract, such other activities as may be specified in the SC.

3.3 **Confidentiality**

The Consultants, their Sub-consultants and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or the Client's business or operations without the prior written consent of the Client.

3.4 Liability of the Consultants

Subject to additional provisions, if any, set forth in the SC, the Consultants' liability under this Contract shall be as provided by the Applicable Law.

3.5 **Insurance to be taken out by the Consultants**

The Consultants (i) shall take out and maintain, and shall cause any Sub-consultants to take out and maintain, at their own cost (or the Sub-consultants', as the case may be) but on

terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the SC, and (ii) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

3.6 Accounting, Inspection and Auditing

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services, hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges and cost, and the bases thereof (including such bases as may be specifically referred to in the SC); (ii) shall permit the Client or its designated representative periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client; and (iii) shall permit the client to inspect the Consultant's accounts and records relating to the performance of the Consultant and to have them audited by auditors appointed by the client.

3.7 **Consultants' Actions Requiring Client's Prior Approval**

The Consultants shall obtain the Client's prior approval in writing before taking any of the following actions:

(a) Appointing such members of the Personnel as are listed in Appendix C ("Consultant's Sub-consultant's Key Personnel") merely by title but not by name;

(b) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of the Sub-consultant and the terms and conditions of the subcontract shall have been approved in writing by the Client prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub- consultant and its Personnel pursuant to this Contract; and

(c) any other action that may be specified in the SC

3.8 **Reporting Obligations**

The Consultants shall submit to the Client the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.

3.9 **Documents Prepared by the Consultants to be the Property of the Client**

All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultants for the Client under this Contract shall become and remain the property of the Client, and the Consultants shall, not later than upon

termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software. Restrictions about the future use of these documents and software, if any, shall be specified in the SC.

3.10 Deleted

4. **Consultants' Personnel and Sub-consultants and or Associates**

4.1 General

The Consultants shall employ and provide such qualified and experienced Personnel and Sub-consultants as are required to carry out the Services.

4.2 Description of Personnel

- (a) The titles, agreed job descriptions, minimum qualification and estimated periods of engagement in the carrying out of the Services of each of the Consultants' Key Personnel are described in Appendix C. If any of the Key Personnel has already been approved by the clients his/her name is listed as well.
- (b) If required to comply with the provisions of Clause GCC 3.1.1 hereof, adjustments with respect to the estimated periods "of engagement of Key Personnel set forth in Appendix C may be made by the Consultants by written notice to the Client, provided (i) that such adjustments shall not alter the originally estimated period of engagement of any individual by more than 10% or one week, whichever is larger, and (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1(b) of this Contract. Any other such adjustments shall only be made with the Client's written approval
- (c) If additional work is required beyond the scope of the Services specified in Appendix A, the estimated periods of engagement of Key Personnel set forth in Appendix C may be increased by agreement in writing between the Client and the Consultants, provided that any such increase shall not, except as otherwise agreed, cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1 (b) of this Contract.

4.3 **Approval of Personnel**

The Key Personnel i.e. Professional Staff and Sub-consultants listed by title as well as by name in Appendix C are hereby approved by the Client. In respect of other Key Personnel which the Consultants propose ,to use in the carrying out of the Services, the Consultants shall submit to the client for review and approval a copy of their biographical data and

(in the case of Key personnel to be used within the country of the Government) a copy of a satisfactory medical certificate in the form attached hereto as Appendix D. If the Client does not object in writing (stating the reasons for the objection) within fifteen (15) calendar days from the date of receipt of such biographical data and (if applicable) such certificate, such Key Personnel shall be deemed to have been approved by the Client.

4.4 Working Hours, Overtime, Leave, etc.

- (a) Working hours and holidays for Key Personnel are set forth in Appendix E hereto. To account for travel time, foreign Personnel carrying out Services inside the Government's country shall be deemed to have commenced (or finished) work in respect of the Services such number of days before their arrival in (or after their departure from) the Government's country as is specified in Appendix E hereto.
- (b) The Personnel of all types engaged by Consultant to provide Services on this Contract shall not be entitled to be paid for overtime nor to take paid sick leave or vacation leave <u>except as specified in Appendix E</u> hereto, and except as specified in such Appendix, the Consultants' remuneration shall be deemed to cover these items. All leave to be allowed to the Personnel is included in the staff-months of service set for in <u>Appendix C.</u> Any taking of leave by Key & Sub Professional Personnel shall be subject to the prior approval by the Client and the Consultants shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services.

4.5 **Removal and/or Replacement of Personnel**

- a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Personnel, the Consultants shall forthwith provide as a replacement a person of equivalent or better qualifications.
- b) If the Client (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Client's written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience acceptable to the Client.
- c) Any of the Personnel provided as a replacement under Clauses (a) and (b) above, the rate of remuneration applicable to such person as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such

replacement, shall be subject to the prior written approval by the Client. Except as the Client may otherwise agree,

(i) The Consultants shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and

(ii) The remuneration to be paid to any of the Key Personnel provided as a replacement shall be 95% of the remuneration which would have been payable to the Key Personnel replaced for the reason other than death/extreme medical ground.

(iii) For total replacement upto 33% of key personnel, remuneration shall be reduced by5%

(iv) For total replacement upto between 33% to 50%, remuneration shall be reduced by 10% for every replaced key personnel and

(v) For total replacement beyond 50% of the total of key personnel, the client may initiate action for termination/debarment of such consultants for future projects of TNRDC.

(vi) In exceptional situations where the replacement with equivalent or better qualification is not available as mentioned in Sub-Para (a) above, replacement with lower qualifications than the originally approved may be accepted with reduction in remuneration as per the procedure prescribed below. This kind of relaxation shall however, be limited to replacement of 2 key personnel only

(vii) The new proposed personnel as a replacement has to be evaluated as per the criteria fixed at the time of evaluation of original proposal and marks/rating and then, If the original personnel (included in the original proposal based on which the contract was awarded) is to be replaced at the instruction of TNRDC and the new proposed personnel is having less qualification/ experience i.e marks/rating (but fulfilling the minimum requirement as per TOR), his remuneration would be reduced by 15% over and above the stipulated conditions in the contract because of less qualified personnel.

(viii) If the original personnel (included in Contract Agreement) is to be replaced by the Consulting firm and the new proposed personnel is having less qualification/ experience (marks/rating), then his remuneration would be decreased proportionally in comparison to the marks of the original personnel.

(ix) This will also take into account the contract condition and if the proposed reduction is less than that stipulated in contract condition, it would be as per the contract provision. (x) It will be ensured that the new proposed personnel should score at least 75% of the marks of the originally approved key personnel.

(xi) Both the Consulting firm and the proposed personnel should give the undertaking along with the replacement CV.

(xii) The CV should be signed by personnel and the consulting firm in every page. If the CV is found incorrect at later date, the personnel accepted would be removed from the assignment and debarred from further TNRDC works for an appropriate period to be decided by TNRDC and the new proposed personnel in place of removed personnel would be paid 15% less salary than the original personnel. This 15% reduction in the salary will be imposed as penalty for submitting the incorrect information. This penalty will be imposed only once. If the same consulting firm submits incorrect information again second time, necessary action will be taken by TNRDC to black list the firm.

- d) Penalty equivalent to 10% of monthly billing rate of an expert per month will be recovered for non-deployment of the expert as per the agreed programme.
- e) Any unauthorized leave or absence of any staff shall attract the penalty on pro-rata basis with respect to the man month rate.
- 4.6 Deleted

5. **Obligations of the Client**

5.1 **Deleted**

5.2 Access to Land

The Client warrants that the Consultants shall have, free of charge, unimpeded access to all land in the Government's country in respect of which access is required for the performance of the Services. The Client will be responsible for any damage to such land or any property thereon resulting from such access and will indemnify the Consultants and each of the Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Consultants or any Sub-consultant or the Personnel of either of them.

5.3 **Change in the Applicable Law**

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost or reimbursable expenses incurred by the Consultants in performing the Services, then the

remuneration and reimbursable expenses otherwise payable to the Consultants under this Contract shall not be increased or decreased, except applicable Service Tax, which will be reimbursed by the Client on production of proof of payment by the Consultant

5.4 Services, Facilities and Property of the Client

The Client shall make available to the Consultants and the Personnel, for the purposes of the services and free of any charge, the services, facilities and property described in Appendix F at the times and in the manner specified in said Appendix F, provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Consultants for the performance of the Services, (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Clause GC 6.I(c) hereinafter.

5.5 Payment

In consideration of the Services performed by the Consultants under this Contract, the Consultants shall raise invoice as per the schedule of payment at the specific stage of the Contract as detailed under:

S.No.	Description	Payment
1	On Submission of Inception Report, Engineering Survey	15%
I	and Investigation Reports	1576
2	On Submission of Preliminary Project Report	20%
3	On submission of Draft Detailed Project Report and	20%
5	Bidding Documents	2070
4	On submission of Final Detailed Project Report and	30%
4	Bidding Documents	50 %
5	On approval of Final Detailed Project Report	15%
	Total	100%

The payments to the Consultants by Client will be made as provided in GC 6 of this Contract.

No payment shall become eligible for the next stage till the consultant completes to the satisfaction of the client the work pertaining to the preceding stage. The payment for the work of sub-soil investigation (Boring) will be as per plan approved by the client and will be paid as per actuals at the rates quoted by the consultants. The payment for the quantity given by the client for boring will be deemed to be included in the above mentioned payment schedule. Any adjustment in the payment to the consultants will be made in the final payment only.

5.6 **Counterpart Personnel**

- a) If so provided in Appendix F hereto, the Client shall make available to the Consultants, as and when provided in such Appendix F, and free of charge, such counterpart personnel to be selected by the Client, with the Consultants' advice, as shall be specified in such Appendix F. Counterpart personnel shall work under the exclusive direction of the Consultants. If any member of the counterpart personnel fails to perform adequately any work assigned to him by the Consultants which is consistent with the position occupied by such - member, the Consultants may request the replacement of such member, and the Client shall not unreasonably refuse to act upon such request.
- b) If counterpart personnel are not provided by the Client to the Consultants as and when specified in Appendix F, the Client and the Consultants shall agree on (i) how the affected part of the Services shall be carried out, and (ii) the additional payments, if any, to be made by the Client to the Consultants as a result thereof pursuant to Clause GC 6.1(c) hereof.

6. **Payments to the Consultants**

6.1 **Cost Estimates; Ceiling Amount**

- (a) An estimate of the cost of the Services payable is set forth in Appendix H.
- (b) Except as may be otherwise agreed under Clause GC 2.6 and subject to Clause GC 6.1(c), payments under this Contract shall not exceed the ceilings, as specified in the SC. The Consultants shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of either of these ceilings.
- (c) Notwithstanding Clause GC 6.I(b) hereof, if pursuant to clauses GC 5.3,5.4 or 5.6 hereof, the Parties shall agree that additional payments shall be made to the Consultants in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause GC 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Clause GC 6.1 (b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.
- 6.2 Deleted

6.3 Currency of Payment

(a) Payments shall be made in Indian Rupees

(b) Deleted

6.4 Mode of Billing and Payment

Billing and payments in respect of the Services shall be made as follows:

- (a) Deleted
- (b) As soon as practicable and not later than Seven (07 days) after the end of each stage of the contract the Consultants shall submit to the Client in duplicate, itemized statements, accompanied by copies of invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to Clause GC 5.5
- (c) The Client shall cause the payment of the Consultants periodically as given in schedule of payment above within Thirty (30) days after the receipt by them, the bills with supporting documents and certification by TNRDC. Only such portion of a statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultants, the Client may add or subtract the difference from any subsequent payments. Interest at the rate specified in the SC shall become payable as from the above due date on any amount due by, but not paid on. such due date.
- (d) The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultants and approved as satisfactory by the Client. The Services shall be deemed completed and finally accepted by the Client and the final report and final statement shall be deemed approved by the Client as satisfactory Sixty (60) calendar days after receipt of the final report and final statement by the Client unless the Client, within such Sixty (60) day period, gives written notice to the Consultants specifying in detail deficiencies in the Services, the final report or final statement. The Consultants shall thereupon promptly make any necessary corrections, and upon completion of such the foregoing process shall be repeated. Any amount which the corrections. Client has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Consultants to the Client within thirty, (30) days after receipt by the Consultants of notice thereof. Any such claim by the Client for reimbursement must be made within twelve (12) calendar months after receipt by the Client of a final report and a final statement approved by the Client in accordance with the above.
- (e) All payments under this Contract shall be made to the account of the Consultants specified in the SC.

7.0 Responsibility for Accuracy of Project Documents

7.1 General

- 7.1.1 The Consultant shall be responsible for accuracy of the data collected, by him directly or procured from other agencies/authorities, the designs, drawings, estimates and all other details prepared by him as part of these services. He shall indemnify the Authority against any inaccuracy in the work which might surface during implementation of the project. The Consultant will also be responsible for correcting, at his own cost and risk, the drawings including any re-survey / investigations and correcting layout etc. if required during the execution of the Services.
- 7.1.2 The Consultant shall be fully responsible for the accuracy of design and drawings of the bridges and structures. All the designs and drawings for bridges and structures including all their components shall be fully checked by a Senior Engineer after completion of the designs. All drawings for bridges and structures shall be duly signed by the (a) Designer, (b) Senior Checking Engineer, and (c) Senior Bridge / Structure Expert. The designs and drawings not signed by the three persons mentioned above shall not be accepted. The Consultant shall indemnify the Client against any inaccuracy / deficiency in the designs and drawings of the bridges and structures noticed during the construction and even thereafter and the Client shall bear no responsibility for the accuracy of the designs and drawings submitted by the Consultants.
- 7.1.3 The survey control points established by the Consultant shall be protected by the Consultants till the completion of the Consultancy Services.

7.2 Retention Money

An amount equivalent to 5% of the contract value shall be retained at the end of the contract for accuracy of design and quantities submitted and the same will be released after the completion of services.

7.3. Penalty

7.3.1 Penalty for Error/Variation

If variation in any of the main quantities of work like earth work including sub grade, GSB,WMM, Bituminous works (BM/DBM/AC/BC),drains, total concrete quantities and reinforcing steel in bridge works or overall project cost, found during execution is more than +/- 15%, the penalty equivalent to **5%** of the contract value shall be imposed. For this purpose retention money equivalent to **5%** of the contract value will be forfeited. This shall exclude any additional/deletion of items/works ordered during the execution.

7.3.2 Penalty for delay

In case of delay in completion of services, a penalty equal to 0.05% of the contract price

per day subject to a maximum **5%** of the contract value will be imposed and shall be recovered from payments due/performance security. However in case of delay due to reasons beyond the control of the consultant, suitable extension of time will be granted.

7.4 ACTION FOR DEFICIENCY IN SERVICES

7.4.1 Consultants liability towards the Client

Consultant shall be liable to indemnify the client for any direct loss or damage accrued or likely to accrue due to deficiency in service rendered by him

7.4.2 Warning / Debarring

In addition to the penalty as mentioned in para 7.3, warning may be issued to the erring consultants for minor deficiencies. In the case of major deficiencies in the Detailed Project Report involving time and cost overrun and adverse effect on reputation of TNRDC, other penal action including debarring for certain period may also be initiated as per policy of TNRDC

8. Fairness and Good Faith

8.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

8.2 **Operation of the Contract**

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a settlement of disputes in accordance with Clause GC 9 hereof.

9 Settlement of Disputes

9.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or the interpretation thereof.

9.2 **Dispute Settlement**

Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions specified in the SC.

9.3 Further, in case of any dispute or difference between the parties to the contract 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 beyond such date. No other courts or persons or bodies will have any jurisdiction over the dispute/s beyond such date.

III. SPECIAL CONDITIONS OF CONTRACT

GC Clause

A. Amendments of, and Supplements to, Clauses in the General Conditions of Contract

1.1(a) The words' in the Government's country" are amended to read 'in INDIA"

1.4 The language is: English

1.6.1 The addresses are:

Client:

Attention:	
Cable address:	
Telex:	
Facsimile:	

Consultants:

Attention:	
Cable address:	
Telex:	
Facsimile:	

[Note': Fill in the Blanks]

- 1.6.2 Notice will be deemed to be effective as follows:
 - (a) in the case of personal delivery or registered mail, on delivery;
 - (b) in the case of telexes, 24 hours following confirmed transmission;
 - (c) in the case of telegrams, 24 hours following confirmed transmission; and
 - (d) in the case of facsimiles, 24 hours following confirmed transmission.

1.9	The Authorised Representative are:
	For the Client:
	For the Consultants:

- 1.10 The Consultants, Sub-consultants and the Personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this contract and the client shall perform such duties in regard to the deduction of such tax as may be lawfully imposed.
- 2.1 The effectiveness conditions are the following:

The contract has been approved by TNRDC. The consultant will furnish within 7 days from the date of issue of Letter of Award, unconditional Bank Guarantee in the prescribed format for an amount equivalent to **5** % of the total contract value to be received by him towards Performance Security valid for a period of six months beyond the date of

completion of services. The Bank Guarantee will be released by TNRDC upon successful completion of services and rectification of errors if any, found during implementation of services.

- 2.2 The time period shall be <u>one month</u> or such other time period as the parties may agree in writing.
- 2.4 The time period shall be 0<u>3 months</u>

3.4 Limitation of the Consultants' Liability towards the Client

- (a) Except in case of gross negligence or willful misconduct on the part of the Consultants or on the part of any person or firm acting on behalf of the Consultants in carrying out the Services, the Consultants, with respect to damage caused by the Consultants to the Client's property, shall not be liable to the Client:
 - i) for any indirect or consequential loss or damage; and
 - Consultant will maintain ii) at its expenses; Professional Liability Insurance including coverage for errors and omissions caused by Consultant's negligence in the performance of its duties under this agreement, (A) For the amount not exceeding total payments for Professional Fees and Reimbursable Expenditures made or expected to be made to the Consultants hereunder OR (B) the proceeds, the Consultants may be entitled to receive from any insurance maintained by the Consultants to cover such a liability, whichever of (A) or (B) is higher.
 - iii) The policy should be issued only from an Insurance Company operating in India.
 - iv) The policy must clearly indicate the limit of indemnity in terms of "Any One Accident" (AOA) and "Aggregate limit on the policy period" (AOP) and in no case should be for an amount less than stated in the contract.
- v) Deleted
- vi) The contract may include a provision thereby the Consultant does not cancel the policy midterm without the consent of TNRDC. The insurance company may provide an undertaking in this regard.
 - (b) This limitation of liability shall not affect the Consultants' liability, if any, for damage to Third Parties caused by the Consultants or any person or firm acting on behalf of the Consultants in carrying out the Services.
 - (c) Professional Liability Insurance may be accepted for initially one year which shall be extended annually for total period for five years.

3.5 The risks and the coverage shall be as follows

- (a) Third Party motor vehicle liability insurance as required under Motor Vehicles Act, 1988 in respect of motor vehicles operated in India by the Consultants or their Personnel or any Sub-consultants or their Personnel for the period of Consultancy.
- (b) Third Party liability insurance with a minimum coverage, of Rs. 1.0 million for the period of consultancy.
- (c) Professional liability insurance as per 3.4 (a) (ii) of SC of the consultancy, with a minimum coverage equal to estimated remuneration and reimbursable.
- (d) Employer's liability and workers' compensation insurance in respect of the Personnel of the Consultants and of any Sub-consultant, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and
 - (e) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultants' property used in the performance of the Services, and (iii) any documents prepared by the Consultants in the performance of the Services.
- 3.7 (c) The other actions are
 - (i) Taking any action under a civil works contract designating the Consultants as "DPR Consultant", for which action, pursuant to such civil works contract, the written approval of the Client as "Employer" is required".
- 3.9 The Consultants shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Client.
- 6.1(b) The ceiling in currency is: <u>80%</u>
- 6.4 (c) The interest rate is 6% per annum
- 6.4(e) The account is: -

[Note: Insert account number, type of account and name and address of the Bank]

9.2 Disputes shall be settled by arbitration in accordance with the following provisions:

9.2.1 Selection of Arbitrators

Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three arbitrators, in accordance with the following provisions:

- a) Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator or within thirty (30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to the President, Indian Roads Congress, New Delhi, for a list of not fewer than five nominees and, on receipt of such list, the Parties shall alternately strike names there from, and the last remaining nominee on the list shall be the sole arbitrator for the matter in dispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, the President, Indian Roads Congress, New Delhi, shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute.
- b) Where the Parties do not agree that the dispute concerns a technical matter, the Client and the Consultants shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the latter of the two arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by Secretary, the Indian Council of Arbitration, New Delhi.
- c) If, in a dispute subject to Clause SC 9.2.1 (b), one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to the Secretary, Indian Council of Arbitration, New Delhi, to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute.

9.2.2 Rules of Procedure

Arbitration proceedings shall be conducted in accordance with procedures of the Arbitration & Conciliation Act 1996, of India unless the Consultant is a foreign national/firm, where arbitration proceedings shall be conducted in accordance with the rules of procedure for arbitration of the United Nations Commission on International Trade Law (UNCITRAL) as in force on the date of this Contract.

9.2.3 **Substitute Arbitrators**

If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.

9.2.4 **Qualifications of Arbitrators**

The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) through (c) of Clause 9.2.1 hereof shall be an internationally/nationally recognized legal or technical expert with extensive experience in relation to the matter in dispute.

9.2.5 **Payment to Arbitrator**

(a) TNRDC has decided that the maximum amount payable per arbitrator in arbitration case shall be as under:

SI.	Particulars	Maximum amount payable per Arbitrator/
No.		per case
1	Arbitrator fee	Rs. 8,000/- per day subject to a maximum 2 lacs
		Or
		Rs 1.5 lacs (lump sum) subject to
		publishing the
		award within 12 months.
2	Reading Charges	Rs 6,000/-
3	Secretarial Assistance	Rs 5,000/-
4	Incidental charges (telephone,	Rs 6,000/-
	fax, postage etc.)	
5	Charges for	Maximum of Rs.10,000/-
	publishing/declaration of the	
	Award	
6	Other expenses (actuals against	Maximum ceiling
	bills subject to the prescribed	Economy class (by air), First class AC (by
	ceiling) Travelling Expenses	train)
		and AC car (by road)
	Lodging and Boarding	1. Rs 2,500/- per day (in metro cities)
		2. Rs 2,000/- per day (in other cities)
		3. Rs 1,000/- per day, if any Arbitrator
		makes their own arrangements.
7	Local Travel	Rs.1,000/- per day
8	Extra charges for days other than	Rs 10,000/- per day
	hearing / meeting days	
	(maximum for 2 days)	

(b) In exceptional cases such as involving major legal implications/wider ramifications/higher financial stakes etc., a special fee structure could be fixed in consultation with the contractor/ supervision consultants and with the specific approval of TNRDC before appointment of the Arbitrator.

9.2.6 Miscellaneous

In any arbitration proceeding hereunder:

- (a) proceedings shall, unless otherwise agreed by the Parties, be held in Chennai.
- (b) The English language shall be the official language for all purposes; and

(c) The decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

IV. APPENDICES

Appendix A: Description of the Services

Details as per TOR

Stage No.	Activity	No. of copies	Time period
1.	 a. Inception Report, b. Engineering Survey & Investigation Report c. Geo-technical investigation and sub-soil exploration report 	3	20 days
2.	Preliminary Project Report	3	30 days
3.	Draft Detailed Project Report	3	60 days
4.	Final Detailed Project Report	10	90 days
5.	Submission and Project clearances from concerned agencies	Original letters from the concerned agencies and 5 photocopies of each.	90 days

Appendix B: Reporting Requirements

Appendix C: Key Personnel and Sub-consultants

- [List under: C.1 Titles [and names, if already available], detailed job descriptions and minimum qualifications. experience of Personnel to be assigned to work and staff- months for each.
 - C-2 Deleted
 - C-3 Deleted

C-4 List of approved Sub-consultants [if already available]; same information with respect to their Personnel as in C-I through C-4)

Appendix D: Medical Certificate

-Deleted-

Appendix E: Hours of Work for Key Personnel

The Consultants Key personnel and all other Professional / Sub Professional / Support Staff / Sub-Consultancy personnel shall work 6 days (Monday to Saturday) every week and observe the Gazetted Holidays of Government of Tamil Nadu as Holidays. The Consultant shall work as per the work program of the client. In this context incase the work plan of the Consultant needs suitable modifications, the same shall be carried out and submitted to the client for consideration. The Consultants hours of work normally shall match with that of client's activities. No extra remuneration shall be claimed or paid for extra hours of work required in the interest of Project completion.

Appendix F: Duties of the Client

- 1. To give access for the Consultant to carry out the works as per the contractual obligations
- 2. Engineering Details on Project Road as available with the TNRDC will be given to the Consultant

Appendix G:

-Deleted-

Appendix H: Cost Estimates

List hereunder cost estimate

SUMMARY OF COSTS

No.	Description	Amount in Rs.
1	Remuneration for Professional Staff	
11	Provision for Investigations and Engineering Surveys	
	Provision for Reports, Drawings, Travel, Office equipment, software and other relevant expenses as determined by the Consultant	
	Sub Total	
	Service Tax @ :	
	Grand Total	

Note: Payments will be made as per stipulations of the Conditions of Contract.

BREAKDOWN OF COSTS

I. Remuneration for Professional Staff

S.No	Position	Name	Rate	No. of man- months	Amount
1	Senior Bridge Engineer cum Team leader			3	
2	Bridge Engineer			3	
3	Material-cum-Geo-technical Engineer			2	
4	Senior Survey Engineer			2	
5	Quantity Surveyor/Documentation Expert			2	
6	Highway Engineer			1	
7	Environmental Specialist			1	

Note : All necessary inputs of manpower such as sub professional staff, field technical staff, office staff other than the above as deemed necessary shall be provided by consultants within the quoted price to ensure that the entire work is completed in accordance with the TOR within stipulated time frame.

II. Provision for Investigations and Engineering Surveys

No	Name of the Work	Unit	Quantity	Rate	Amount
1	Topographic Survey	Km	03		
2	Inventory and condition survey	Km	03		
3	BBD for Pavement Evaluation	Km	02		
4	Sub grade Investigation	Nos	04		
5	Sub - Soil Investigations	Nos	05		
6	Utility Mapping	Km	03		
7	Baseline Survey for Environmental clearance		LS		
	Total				

Note: Adequacy of Investigations and Engineering /Traffic Surveys required for the work shall be assessed by the Consultants

III. Provision for Reports, Drawings, Travel, Office equipment, software and other relevant expenses as determined by the Consultant

No	Name of the Work	Unit	Quantity	Rate	Amount
1	Provision for Reports, Drawings, Travel, Office equipment, software and other relevant expenses as determined by the Consultant	LS	01		
	Total				

Appendix I:

FORM OF PERFORMANCE SECURITY (PERFORMANCE BANK GUARANTEE) (Clause-13 of ToR)

То

M/s Tamil Nadu Road Development Company Ltd., Regd Office: Sindur Panthion Plaza, 2nd Floor, No:346, Pantheon Road, Egmore Chennai – 600 008, Tamil Nadu, India

WHEREAS:

..... (hereinafter called the "Consultant ") had submitted the proposal for the work " Consultancy Services For Preparation Of Detailed Project Report For Construction Of High Level Bridges Across Palar River At Km: 76/000 In East Coast Road In Tamil Nadu "

- (A) Based on the above, the bid submitted by M/s------, a company/firm incorporated under ------ Act having its registered office at ------ (address) has been accepted by M/s Tamil Nadu Road Development Company Ltd., a company incorporated under the Companies Act, 1956 and having its Registered Office at Sindur Panthion Plaza, 2nd Floor, No:346, Pantheon Road, Egmore Chennai – 600 008, hereinafter called 'TNRDC' and a Letter of Award (LOA) was issued by TNRDC vide its communication no. ****** dated ****** to the ******* [Bidder] requiring, inter alia, the execution of Contract Agreement within Fifteen [15] days of acceptance of LOA.
- (B) As provided in Request for Proposal (RFP) the Consultant has to furnish a Performance Security to TNRDC for Rs......(Rupees.....Only) (the "Guarantee Amount") as security for due and faithful performance of its obligations, under and in accordance with the RFP and/or LOA during the Assignment Period (as defined in the Contract Agreement).
- (C)We, ***** through our Branch at ***** (the "Bank") have agreed to furnish this Bank Guarantee by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Consultants obligations during the Consultancy Period, under and in accordance with the Contract, and agrees and undertakes to pay to TNRDC, upon its mere first written Page 111 of 118

demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Consultant, such sum or sums upto an aggregate sum of the Guarantee Amount as may be claimed by TNRDC and without TNRDC being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

- 2. A letter from TNRDC or under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard, that the Consultant has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the RFP and/or LOA and/or Contract shall be conclusive, final and binding on the Bank. The Bank further agrees that TNRDC shall be the sole judge as to whether the Consultant is in default in due and faithful performance of its obligations during the Assignment Period under the Contract and its decision that the Consultant is in default shall be final, and binding on the Bank, notwithstanding any differences between TNRDC and the Consultant, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Consultant for any reason whatsoever.
- 3. We, the Bank unconditionally undertake to pay to TNRDC any money so demanded under this Guarantee notwithstanding any dispute or disputes raised by the Bidder or any other party including in any suit or proceeding pending before any court or tribunal relating thereto or any instructions or purported instructions by the Bidder or any other party to the Bank not to pay or for any cause to withhold or defer payment to TNRDC under this Guarantee. The Bank's liability under this Guarantee is irrevocable, unconditional, absolute and unequivocal. The payment so made by the Bank under this Guarantee shall be a valid discharge of the bank's liability for payment hereunder and the Bidder shall have no claim against the Bank for making such payment.
- 4. In order to give effect to this Guarantee, TNRDC shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Consultant and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
- 5. It shall not be necessary, and the Bank hereby waives any necessity, for TNRDC to proceed against the Consultant before presenting to the Bank its demand under this Guarantee.
- 6. TNRDC shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Contract or to extend the time or period for the compliance with, fulfilment and/ or performance of all or any of the obligations of the Consultant contained in the Contract or to postpone for any time, and from time to time, any of the rights and powers exercisable by TNRDC against the Consultant and either to enforce or forbear from enforcing any of the terms and conditions contained in the Contract and/or the securities available to TNRDC and the Bank shall not be released from its liability and obligation under these presents by any exercise by TNRDC of the liberty with

reference to the matters aforesaid or by reason of time being given to the Consultant or any other forbearance, indulgence, act or omission on the part of TNRDC or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.

- 7. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by TNRDC in respect of or relating to the Contract or for the fulfilment, compliance and/or performance of all or any of the obligations of the Consultant under the Contract.
- 8. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 9 below and unless a demand or claim in writing is made by TNRDC on the Bank under this Guarantee, not later than 6 (six) months from the date of expiry of this Guarantee (i.e) on or before **[date]** referred as **End Date** herein below, all rights of TNRDC under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
- 9. We, the Bank further agree that the Guarantee herein contained shall remain in full force and effect upto [date] the date which falls nine (09) Months from the date of this Bank Guarantee i.e. up to 06 months beyond the expiry of the Contract of 03 months. Unless a demand or claim under this Guarantee is made on the Bank by TNRDC or under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard, in writing on or before the said End Date (i.e) [date] the Bank shall be discharged from all liability under this Guarantee thereafter.
- 10 We hereby agree to renew and extend the validity of this guarantee for a period not exceeding one year from the End Date or such period, on a request made by TNRDC or under the hand of any of the employee of TNRDC or any other person or entity duly authorised by TNRDC in this regard
- 11. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of TNRDC that the envelope was so posted shall be conclusive.
- 12. We, the bank lastly undertake not to revoke this Guarantee during its currency.
- 13. Notwithstanding anything contained herein.

- b) The Bank Guarantee shall be valid upto [date], 20_.
- *c)* Unless a demand in writing is made upon us on or before _____, [date] or any other extended date, all our liability under this guarantee shall cease.

IN WITNESS WHEREOF THE BANK HAS SET ITS HANDS HERETO ON THE DAY, MONTH AND YEAR MENTIONED HEREUNDER.

Signed and Delivered On behalf of(Bank name)

(Signature) (Date)

by the hand of Mr (name of authorized signatory)

Designation

Note:

- a) Address of the controlling office of the issuing branch with phone number and fax number to be provided.
- b) Authenticated copy of Letter of Authority authorizing the signatory of this guarantee to execute the same to be enclosed herewith.

Appendix J:

Deleted

Appendix K

Letter of invitation

Appendix L

Letter of Award

Appendix M

Minutes of pre-bid meeting, Clarifications and Amendments