

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
Regional Office, Mumbai**

**CONSULTANCY SERVICES FOR AUTHORITY'S ENGINEER FOR REHABILITATION AND
UPGRADATION OF KASHEDI GHAT SECTION OF NH-17 [NEW NH NO. 66] TO FOUR-
LANES WITH PAVED SHOULDERS FROM EXISTING KM 148/0 TO KM 161/600 [DESIGN
KM 149+510 TO KM 158+467] INCLUDING CONSTRUCTION OF TWIN-TUBE SIX-LANE
TUNNEL THROUGH AN ENGINEERING, PROCUREMENT AND CONSTRUCTION (EPC)
CONTRACT UNDER NHDP-IV IN THE STATE OF MAHARASHTRA.
RO/MUM/AE/NHDP-IV-02/2017-18 (2nd Call)**

**REQUEST FOR PROPOSAL
(RFP)**

Room 508 & 509
Konkan Bhawan
CBD Belapur, Navi Mumbai – 400 614

11th October, 2018

RO/MUM/AE/NHDPIV-02/2017-18

Date: 11.10.2018

To,

All Eligible Consultants registered on INFRACON

Sub.: Consultancy Services for Authority's Engineer For Rehabilitation and upgradation of Kashedi Ghat section of NH-17 [New NH No. 66] to four-lanes with paved shoulders from existing km 148/0 to km 161/600 [Design km 149+510 to km 158+467] including construction of twin-tube six-lane tunnel through an Engineering, Procurement and Construction (EPC) Contract under NHDP-IV in the state of Maharashtra.

Dear Sir,

Request for Proposals (RFP) for Authority's Engineer Services for subject project through e-Tendering is invited from all Eligible Consultants. Applications due date is **11.10.2018**. RFP can be viewed/downloaded, free of cost, till **13.11.2018** up to **17:00** hours.

2. The Ministry of Road Transport & Highways (MoRTH) has decided to implement the concept of 'Integrity Pact' in MoRTH projects. The Integrity Pact (IP) envisages an agreement between the prospective bidders and the buyers committing the persons/officials of both the parties, not to exercise any corrupt influence on any aspect of the contract. The IP also envisages empanelment of the Independent External Monitors (IEM). The IEM may review independently and objectively whether and to what extent parties have complied with their obligations under the pact. Accordingly, a draft Integrity Pact format is enclosed with the RFP. All interested Applicants are requested to sign Integrity Pact and submit the same along-with RFP document.

3. In this regard, it is further requested to submit the certificates in respect of the experience claimed in the CVs of Key personnel proposed in the technical proposal along with RFP. In case experience certificate is not available, a copy of self-declaration as uploaded on INFRACON website may be enclosed in support of authenticity of the information. The evaluation will be carried out on the basis of certificates enclosed/self-declaration enclosed with the technical proposal.

4. Please refer following provision regarding fake/incorrect/inflated CV [clause 3.4(iv) (g) of section-2 of RFP]

"In case of CV of a person is turned out to be fake/incorrect/inflated during the assignment, the consultancy firms shall have to refund the salary and perks drawn in respect of the person apart from other consequences."

5. The RFP shall also be received through "INFRACON" (www.infracon.com). As such before submitting the proposal the Consultant shall mandatorily register and enlist themselves (the firm and all key personnel), on the MoRTH portal "INFRACON" and furnish registration details along with its RFP. A copy of Infracon Operations Procedure is also enclosed for bidder's reference.

6. All the bidders registered on INFRACON shall form a Team on INFRACON and which would be assigned unique INFRACON Team ID. Bidders while submitting the proposal shall quote the INFRACON Team ID.

7. In view of above, the consultancy firms are requested to give due diligence before proposing CVs of key personnel.

Yours faithfully,

(Anshumali Srivastava)
Regional Officer (Maharashtra & Goa)
Regional Office, Mumbai
Ministry of Road Transport & Highways

Encl:

1. RFP Document
2. Draft Integrity Pact
3. INFRACON Operation Procedure
4. Details of IEM

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REQUEST FOR PROPOSAL (RFP)**SECTION 1: INFORMATION TO CONSULTANTS**

Sub.: **Consultancy Services for Authority's Engineer For Rehabilitation and upgradation of Kashedi Ghat section of NH-17 [New NH No. 66] to four-lanes with paved shoulders from existing km 148/0 to km 161/600 [Design km 149+510 to km 158+467] including construction of twin-tube six-lane tunnel through an Engineering, Procurement and Construction (EPC) Contract under NHDP-IV in the state of Maharashtra.**

GENERAL:-

1. The Ministry Road Transport & Highways, through the Regional Office, Mumbai Ministry Road Transport & Highways, through the Regional Office, Mumbai (the '**Employer**') invites proposals from eligible consultant for engaging Authority's Engineer (AE) on the basis of International Competitive Bidding for the following contract package in the State of Maharashtra.

TABLE 1: DETAILS OF PROJECT

S No	Consultancy Package	NH No.	State	Project Stretch	Project Length (Km) / Project Cost	Assignment period (months)
1	Consultancy Services for Authority's Engineer For Rehabilitation and upgradation of Kashedi Ghat section of NH-17 [New NH No. 66] to four-lanes with paved shoulders from existing km 148/0 to km 161/600 [Design km 149+510 to km 158+467] including construction of twin-tube six-lane tunnel through an Engineering, Procurement and Construction (EPC) Contract under NHDP-IV in the state of Maharashtra.	NH -17 (New NH - 66)	Maharashtra	Kashedi Ghat section of NH-17	8.957km 502.25 Cr.	78 months (Construction period 30 month+ Maintenance/DLP Period 48 months)

The RFP shall be received through "INFRACON" (www.infracon.nic.in) and will be

evaluated based on details furnished on "INFRACON". As such before submitting the proposal, the Consultant (the firm and all key personnel) shall mandatorily register and enlist themselves, on the MoRTH portal "INFRACON" and upload all relevant information to enable correct evaluation of RFP.

All the bidders registered on "INFRACON" shall form a Team on "INFRACON" which would be assigned unique INFRACON Team ID. Bidders while submitting the RFP proposal shall furnish registration details including INFRACON Team ID. A copy of INFRACON Operation Procedure is enclosed for bidder's reference.

2. Selection of AE shall be as per selection procedures given in the Model Agreement for Engineering Procurement and Construction. The selected AE shall be intimated to the Contractor.
3. The proposal shall be submitted in English Language and all correspondence would be in the same language.
4. Ministry Road Transport & Highways, through the Regional Office, Mumbai (Name of Employer) *intends to appoint a Consultant to act as Authority's Engineer for implementation of this EPC project.* As per the Terms and Conditions of the EPC Agreement (s), the Authority's Engineer shall perform all the duties as per TOR given in this RFP alongwith any amendment thereof. The selection of Authority's Engineer shall follow the laid down procedures given in the Contract Agreement signed between Employer and Contractor.
5. The interested consultancy firms may download the RFP document from the official website of the Employer w.e.f. **11.10.2018 [11.00 hrs] to 13.11.2018 upto 1700 hrs.** The Consultant who download the RFP document from the website will be required to pay the non- refundable fee of Rs. 5,000/- at the time of the submission of the Bid proposal, through DD payable to RPAO, MoRTH, Mumbai. The RFP will be invited through e-tendering portal. Refer Procedure under e-tendering for submission of RFP through e-tendering.
6. The Applicant shall furnish as part of its Proposal, a bid security of Rs. 50,000 (fifty thousand) in the form of a Bank Guarantee (as per the format specified in Appendix N of this RFP document) (the "**Bid Security**"), valid for 45 days beyond the validity of the bid. The Bid submitted without Bid Security will be summarily rejected. The Bid Security of the successful Bidder will be returned when the Bidder has signed the Contract Agreement with the Employer and has furnished the required Performance Guarantee as specified in the document with in 15 days from the receipt of the Letter of Acceptance. The Bid Security will be forfeited:
 - (a) If a Bidder withdraws its bid during the period of bid validity. Or
 - (b) If the Bidder fails to accept the Employer's corrections of arithmetic errors in the Bidder's bid (if any), or
 - (c) If the Successful Bidder fails to sign the contract agreement with the Employer with in the prescribed period, or
 - (d) If the Successful Bidder fails to furnish the Performance Security with in the stipulated time.
 - (e) Unqualified bidders would be informed regarding their non-qualification, without

In case of JV, the BG shall be furnished on behalf/in the name of the JV and not individually in the name of JV member. The BG may be submitted by any/ or both JV members or their Associate partners. The Associate member is also permitted to submit BG, but BG should be in the name of bidder(combine name including lead member and associates member).

7. The proposal should be submitted by consultancy firms in two parts. The two parts of the proposal are **Part 1: Technical Proposal** and **Part 2: Financial Proposal**. For a given EPC Project, Stage -1 of the Evaluation shall consider the evaluation of the Technical Proposal (i.e. Part 1). The firms scoring the qualifying marks (minimum 75%) as mentioned in RFP shall only be considered for further evaluation. Under stage 2, the financial proposal of such firms as selected above shall be opened and evaluated. Proposals will finally be ranked according to their combined technical and financial scores as specified in clause 5 of section 2. The first ranked Applicant shall be selected for negotiation (the “ Selected Applicant”) while the second ranked Applicant will be kept in reserve.
8. The total time period for the assignment as Authority’s Engineer will be for Construction Period* +48 Months for Maintenance Period with reduced man power.
9. Consultants may apply either as a sole firm or forming Joint Venture with other consultants. In case of Joint Venture, the maximum number of Joint Venture partners is limited to 2 (i.e. one lead + 1 JV partners). Formulation of more than one JV/association with different partners for the same work is not allowed and all such proposal involving the firms shall be treated as non-responsive. If the consultant submits bids as sole applicant and also in JV/ Association with another consultant, both bids shall be summarily rejected. No consultant shall submit more than one bid.
10. The Applicant whether a sole applicant or lead member with joint venture(s) may include an Associate company also. Credentials of associate firm, except key personnel, if any will not be considered for evaluation. Associate firm need not be MoRT&H empanelled consultant. The applicant shall submit a Memorandum of Understanding (MOU) with the Associate regarding the role and responsibilities of the Associate Company along with the proposal. Maximum numbers of key personnel of the associate firm during the RFP Proposal and implementation of contract is limited to 3.
11. Consulting firms meeting the following criteria are only eligible for applying for this assignment. Firms not meeting these criteria, need not apply.

The construction period to be indicated in the RFP by concerned Technical Division inviting the RFP.

A). Eligibility criteria for sole applicant firm.

S.No.	Experience of the firm in last 12 years	Annual Turnover***
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	Preparation of DPR (NH/SH/Equivalent)	Project Supervision/IC (NH/SH/Equivalent)	
1 (a).	<p>(i) The firm should have minimum experience of preparation of detailed Project Report/Design Feasibility Study/ of Tunnel** project of aggregate length equal to 3.44 km or more of similar category for which RFP is invited and</p> <p>(ii) The firm should have minimum experience of preparation of detailed Project Report/ Feasibility Study cum Preliminary Design Report of 4*-laning of aggregate length equal to 18.00 km or more of similar category for which RFP is invited.</p> <p>The above two minimum criteria should be satisfied by the firm.</p>	<p>(i) The firm should have minimum experience of Project Supervision/Independent Engineer/Authority's Engineer of Tunnel** project of aggregate length equal to 5.16 km or more of similar category for which RFP is invited and</p> <p>(ii) The firm should have minimum experience of Project Supervision/Independent Engineer/ Authority's Engineer of 4*-laning/Bridge project of aggregate length equal to 27 km or more of similar category* for which RFP is invited.</p> <p>The above two minimum criteria should be satisfied by the firm.</p>	Annual turnover (updated average of last 3 years) of the firm from consultancy business should be equal to or more than 2% of Estimated Project Cost.
1 (b)	<p>(i) Firm should also have prepared DPR/Design/Feasibility Study/ for at least one project of similar category of Tunnel** work of 0.7 km and</p> <p>(ii) The firm should also have prepared DPR/Feasibility Study cum preliminary Design Report for at least one project of similar category of four* laning/bridge work of length equal 3.6 km.</p> <p>The above two minimum criteria should be satisfied by the firm.</p>	<p>Firm should also have experience of Project Supervision/Independent Engineer/Authority' Engineer of at least one project of similar category of Tunnel** work of 0.7 km and firm should also have experience of Project Supervision/Independent Engineer/ Authority' Engineer of at least one project of similar category of four* laning/bridge work of length equal 3.6 km.</p> <p>The above two minimum criteria should be satisfied by the firm.</p>	

** 4/6 lane Tunnel Works for road will be considered as applicable for the project for which the RFP is invited. For standalone Tunnel projects, experience in Tunnel work (either standalone project or as a part of road/rail project) only be considered. The experience of 2 lane road tunnel projects/ tunnel projects of rail/ metro or road will be considered for 4/6 laning tunnel projects with a multiplication factor of 0.4.

*Similar project means 2/4/6 lane as applicable for the project for which RFP is invited. For 2-lane projects experience of 4/6 lane also to be considered with a multiplication factor of 1.5. Experience of 4/6 lane shall be considered interchangeably for 4/6 laning projects. Experience of 2 lane will be considered for 4/6 laning projects with a multiplication factor of 0.75. For standalone bridge projects, experience in bridge work (either standalone project or as a part of road project) only be considered.

B) Eligibility Criteria for partners in case of JV (not more than 1 JV partners shall be allowed)

The lead partner must fulfil at least 50% of requirements at 1(a) of table in para (A) above and other JV partner should fulfil at least 30% of eligibility criteria as indicated at 1(a) of table in para (A) above. Also the lead partner and JV partner jointly should meet the eligibility criteria as mentioned at 1(a) of table in para (A) above. Lead partner should meet the criteria 1 (b) of table in para (A) above.

Note: The weightage given for experience of a firm would depend on the role of the firm in the respective assignments. The firm's experience would get full credit if it was the sole firm in the respective assignment. If the applicant firm has completed projects as JV with some other firms, weightage shall be given as per the JV share***. However if the applicant firm has executed the project as associate with some other firms, 25% weightage shall be given to the applicant firm for the projects completed under such association.

- *** For weightage of experience in any past Consultancy assignment, experience certificate from the client shall be submitted. In absence of clear demarcation of JV share in client certificate, the weightage will be treated as 60 % for lead partner and 40% for minor partner. Annual turnover duly certified by Chartered Accountant shall be accepted. In case of non-availability of such documents no weightage of turnover/experience will be considered.
12. Following enhancement factor will be used for the cost of services provided and for the turnover from consultancy business to a common base value for works completed in India:

Year of completion of services / turnover	Enhancement factor
Financial year in which RFP invited	1.00
One year prior to RFP	1.10
Two year prior to RFP	1.21
Three year prior to RFP	1.33

Applicant should indicate actual figures of costs and amount for the works executed by them without accounting for the above mentioned factors.

In case the financial figures and values of services provided are in foreign currency, the above enhancement factors will not be applied. Instead, current market exchange rate (State Bank of India BC Selling rate as on last date of submission of the bid) will be applied for the purpose of conversion of amount in foreign currency into Indian Rupees.

13. **The Bidder including individual or any of its Joint Venture Member should, in the last 2 years, have neither failed to perform for the consultancy services pertaining to Expressways, National Highways, ISC (Inter State Connectivity) & EI (Economic Importance) works, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder including individual or any of its Joint Venture Member, as the case may be, nor has been expelled or terminated by Ministry of Road Transport & Highways or its implementing agencies for breach by such Bidder including individual or any of its Joint Venture Member. Consultants (sole firm or lead firm and any of the JV partners) who do not fulfil the**

aforesaid condition as on last date of submission of proposal or have been debarred by MoRTH/NHIDCL/NHAI or any other state government's PWD or road development corporations and the debarment is in force, need not apply as their RFP proposal will not be entertained.

14. Employer will not be responsible for any delay, loss or non-receipt of RFP document sent by post/courier. Further, Employer 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.
15. The two parts of the Proposal (Technical proposal and Financial proposal) must be submitted on-line with all pages numbered serially, along with an index of submission as per procedure under e-tendering. The technical proposal is also required to be submitted in a hard bound form exactly as per submission made online with all pages numbered serially along with an index of submission. (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 be not accepted. The Financial proposal is to be submitted online only. Submission in any other form shall not be acceptable. In the event, any of the instructions mentioned herein have not been adhered to, the Employer may reject the Proposal.
16. Employer will be at liberty to keep the credentials submitted by the Consultants at bidding stage, in public domain and the same may be uploaded by Employer on Employer's web-site. Consultants should have no objection if Employer uploads the information pertaining to their credentials as well as of their key personnel.
17. The individual key personnel proposed in the bid by the consultants or any replacement thereof should undertake that they shall have no objection in uploading/hoisting of their credentials by Employer in public domain.
18. Hard copy of RFP submission must be received not later than **17:00 hrs on 14.11.2018** in the manner specified in the RFP document at any of the address given below.

Shri Anshumali Srivastava Regional Officer (Maharashtra & Goa) Regional Office, Mumbai Ministry of Road Transport & Highways Room 508 & 509 5th Floor, Konkan Bhawan CBD Belapur Navi Mumbai	Shri V.S.Deshpande Chief Engineer (NH) Public Works Department 5th Floor Konkan Bhawan CBD Belapur Navi Mumbai	Shri P.S.Mandpe Joint Managing Director-III MSRDC Bandra Worli Sea Link Office Reclamation, Bandra Mumbai
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SECTION 2. LETTER OF INVITATION TO CONSULTANTS

1 INTRODUCTION

- 1.1 Bids are invited from consulting firms either as a sole firm/ joint venture with other consultant willing to act as AE to submit a proposal for providing consulting services required for the assignment named in the attached Letter of Invitation. Your proposal could form the basis for future negotiations and ultimately a contract between your firm and the Employer.
- 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 in Construction Period (30 Months) and Maintenance Period (48 Months).
- 1.4 This RFP is neither an agreement nor an offer by the Authority to the prospective Applicants or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their Proposals pursuant to this RFP. This RFP includes statements and assumptions, which reflect various assessments arrived at by the Authority in relation to the Consultancy. Such assessments and statements do not purport to contain all the information that each Applicant may require. The information contained in this RFP, may not be complete, accurate, adequate or correct. Each Applicant should, therefore, conduct its own investigations about the assignment and the local conditions before submitting the proposal by paying a visit to the Client and the project site, sending written queries to the client, before the date and time specified in the Data Sheet.
- 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) Employer 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 Deleted
- 1.7 Deleted
- 1.8 Consultant have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or than 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 and/or any other action as deemed fit by the Authority at any stage.
- 1.9 It is the Employer's policy that the consultants observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the Employer:
 - (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, non-competitive 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 it 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 the Employer to inspect their accounts and records relating to the performance of the contract and to have them audited by authorized representatives of Employer.
- 1.10 Consultants, their JV partner, 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.
- 1.11 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.
- 1.12 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. The Client will make its best effort to complete negotiations within this period. Should the need arise, however, the Client 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, , If any consultant seeks any replacement(s), while extending the bid validity, then the same shall be evaluated for ascertaining suitability of replacement as per the provisions of the RFP and no remuneration shall be deducted for any such replacement(s). However, the technical evaluation shall take into account of the originally submitted CV(s) only irrespective of replacement sought.
- 2. CLARIFICATIONS AND AMENDMENT OF RFP DOCUMENTS**
- 2.1 The Consultants 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 cable, 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 consultants who have purchased the RFP document. Clarification/amendment will also be hosted on Employer’s web-site.
- 2.2 At any time before the submission of Proposals, the Client 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. Addendum may be sent by mail, cable, telex, facsimile or electronic mail to consultants or/and will be hosted on Employer's website which will be binding on them. The Client may at its discretion extend the deadline for the submission of Proposals.

3. PREPARATION OF PROPOSAL

- 3.1 You are requested to submit your proposal in Two Parts strictly using the formats enclosed herewith (refer section 3,4 and 5) in 2 separate envelopes/ packages and put together in one single outer envelope/package. The two parts shall be:

Part 1: Technical Proposal and

Part 2: Financial Proposal. (To be submitted ONLY online as per uploaded format)

The proposal shall be written in the English language as specified in the Data Sheet. All pages of the Proposal shall be signed by an authorized representative. The representative's authorization shall be confirmed by written Power of Attorney duly notarized to be submitted with the proposal. In case of JV or inclusion of Associate company, a MoU indicating the specific Projects, input and role of each Partner etc. shall be submitted with the proposal.

Part 1: Technical Proposal

- 3.2 You are expected to examine all terms and conditions included in the documents. Failure to act or to provide all requested information will be at your own risk and may result in rejection of your proposal.
- 3.3 During preparation of the Technical proposal you may give particular attention to the following:
- i. The man-months for the assignment shall be that stated in the Terms of Reference. The same shall be considered for the purpose of evaluation as well as award. In case the man months of TOR are amended in view of Client's own initiative or in response to clarification sought by any Consulting firm, the man months so amended and published shall be considered for the purpose of evaluation as well as award.
 - ii. The Consultants should prefer to field as many of their permanent staff as possible. The permanent staff would be considered those already employed with the firm prior to one year from the month during which this Tender Notice is issued. Applicant shall submit the details of the period of employment of the proposed personnel with the firm.
 - iii. No alternative to key professional staff may be proposed and only one Curriculum Vitae (CV) may be submitted for each position and
 - 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. Deleted
- 3.4 Your 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 and, in the case of Joint Venture, for each partner, on assignments of a similar nature. The information which you shall provide on

- each assignment should indicate, *inter-alia*, the profiles of the staff provided, duration, contract amount and firm's involvement. ***The details of assignments on hand shall also be furnished by the consultant and their JV partner, separately.***
- 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. Requirement for submission of CVs.
 - a. CVs strictly in the prescribed format and recently signed in blue ink on each page by both the proposed professional staff and the Managing Director/Head or the authorized representative of the firm.
 - b. Key information should include years with the firm and degree of responsibility held in various assignments. In CV format, at summary, the individual shall declare his qualification & total experience (in years) against the requirements specified in TOR for the position (Ref. Enclosure-B of TOR). If any information is found incorrect, at any stage, action including termination and debarment from future projects upto 2 years may be taken by Employer on the personnel and the Firm.
 - c. If the same CV is submitted by two or more firms in an assignment, zero marks shall be given for such CV. Key personnel has to certify in their CV that he has not consented to any consultant other than the applicant to propose their CV for any position for this assignment. In case the key personnel is found having given consent to more than one bidder, he shall be debarred by the employer for 2 years.
 - d. Deleted.
 - e. All the CVs which are to be evaluated should be complete in all respects including signing and certification by the individual and the firm. .
 - f. If a CV score less than 75% marks, whatever marks it score will be carried forward for maximum 3 nos key personnel for determining the total score of the firm. However, if the Key Personnel does not fulfill the minimum academic qualification (as mentioned at Enclosure-B of TOR of RFP), the overall score of his CV will be evaluated as zero. If the Key Personnel does not fulfill the minimum qualification related to experience (as mentioned at Enclosure-B of TOR of RFP), then zero marks will only be assigned for that sub criteria, but the marks obtained by the CV of the Key Personnel will be carried forward for maximum 3 nos key personnel for determining the total score of the firm. In case, a firm is H-1, then all such Key Personnel (whose CV scores less than 75% or who does not fulfill the minimum qualification) will have to be replaced by the firm at the time of contract negotiations by persons scoring at least 75% marks. The reduction in remuneration of such replacements shall be 5%, 10% and 15 % for 1st replacement, 2nd replacement and 3rd replacement respectively. In case more than 3 CV scores less than 75% marks or Team leader cum Highway Engineer scores less than 75% marks, the proposal shall be considered non-responsive..

- g. In case CV of a person is turned out to be fake/incorrect/inflated during the assignment, the consultancy firms shall have to refund the salary and perks drawn including interest @12% per annum in respect of the person apart from other consequences. In addition to above, 10% of the salary and perks to be refunded shall be recovered from the Firm as penalty.
- v. Deployment Schedule for each key personnel should be formulated and incorporated in the Technical Proposal which will be reviewed on quarterly basis.
 - vi. 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.
 - vii. A certification to the effect should be furnished by the Consultant that they have checked the qualifications and experiences details submitted by the key personnels in the CVs and found to be correct. This certification should be made in CVs of all key personnel after the certification by the candidate. The format of CV includes certification to this effect.
 - viii. Each key personnel of the preferred Consultant shall be called for interview at the time of negotiation at the cost of Consultant.
 - ix. Replacement of key personnel shall be considered only in unavoidable circumstances. In no case more than two replacements of key personnel shall be permitted during negotiation and in such cases Consultant and such key personnel shall have to submit affidavit to the effect that during the period of assignment specified in para 8 of Section:1, the replaced key personnel shall not be professionally employed anywhere in Employer's works. Employer shall not further consider CV of such key personnel directly or indirectly for any of its projects for this period. The reduction in remuneration of such replacements shall be 5% and 10% for 1st replacement and 2nd replacement respectively within validity period of bid. In case during negotiations held within validity period of bid, more than two replacements are sought by the H-1 consultant, his proposal shall be considered as Non-Responsive. In such case the combined score of remaining technically qualified firms, meeting the non-conflict condition shall be evaluated to arrive at new H-1. In case during interaction with the key personnel at the time of negotiation it is found that the key personnel proposed is un-suitable for the assignment position, his replacement by equivalent or better shall be provided by the consultant. The key personnel with such un-suitable CV shall not be considered in any future bids for that position for two years. No deduction for such replacement who are not found suitable during interaction shall be made.
In the eventuality that a firm becomes non-responsive, for the third time, due to the action of replacements of more than 2 key personnel during negotiation, the firm and its constituent JV partners and Associates shall be debarred upto one years for Employer's consultancy projects.
 - x. Any additional information.
- 3.5 The technical proposal must not include any financial information.
- Part 2: Financial Proposal (To be submitted ONLY online as per uploaded formats)**
- 3.6 Your Financial Proposal must be strictly using the formats attached in Section 5. No additional items/quantities other than that specified in the formats should be proposed by the Consultants since the same shall not be considered for the evaluation/award.

Consultants shall be paid billing rates for services rendered by the personnel of all categories namely (i) key Personnel; (ii) sub- Professional personnel and (iii) Support staff on man-moth wise. For calculating billing rates of remaining items of the financial proposal, namely (i) transportation, (ii) Duty travel to site (iii) Office Rent, (iv) office supplies communication etc (v) reports & document printing and (vi) survey equipment etc. quoted amount of selected consultant will be converted to percentage of civil work cost quoted by civil contractor and payment will be made in proportionate to the financial progress of the civil work. Beginning 13th months from the last date of submission of bid, billing rates shall be increased to cover all items of the contract i.e. remuneration, vehicle hire, office rent, consumables, furniture etc @ 5% every 12 months. However, for evaluation and award of the Bid proposals, the quoted initial rate (as applicable for first 12 months from last date of submission of bid) shall be multiplied by the total time input for each position on this contract, i.e. without considering the increase in the billing rates. All payments shall be made in Indian Rupees and shall be subjected to applicable Indian laws withholding taxes if any.

- 3.7 The Financial Proposal should clearly identify as a separate amount, the local taxes (including social security), duties, fees, levies and other charges imposed under the applicable law, on the consultants, the sub-consultants, and their personnel (other than nationals or permanent residents of the government's country); unless the Data Sheet specifies otherwise. This cost, however, will not be considered in evaluation.
- 3.8 Consultants may express the price of their services in the Indian Rupees only.
- 3.9 Goods and Service tax (GST) as applicable minus input tax credit as objectively determined, shall be paid to the consultant while making payment for services rendered. The consultants shall then deposit the same with the tax authorities and provide a proof of having done so within next 90 days in line with policy circulars issued by Employer. Employer shall pay only the GST.

4. SUBMISSION, RECEIPT AND OPENING OF PROPOSALS

4.1 PREPARATION & SUBMISSION OF APPLICATIONS:

- i. Detailed RFP may be downloaded from E-tendering portal of Employer and the Application may be submitted online following the instructions appearing on the screen.
- ii. The following shall be the form of various documents in the Application:

A. Only Electronic Form (to be uploaded on the E-tendering portal of Employer)

- (a) Technical proposal as indicated in para 'B' below
- (b) Financial proposal as per format prescribed in SECTION-5 OF RFP.

B. Hard copy in Original (identical to proposal sto be submitted in Sealed Envelop and also Electronic form to be uploaded on the E-tendering portal of Employer

(I) Technical Proposal in Hard Bound Form including

- (a) Power of Attorney for signing the Application
- (b) If applicable, the Power of Attorney for Lead Member of JV;
- (c) Copy of Memorandum of Understanding between JV partners, if applicable;

- (d) Copy of Memorandum of Understanding with Associate, if applicable
- (e) Firms credentials as per format prescribed in SECTION-3 OF RFP.
- (f) Technical proposal as per format prescribed in SECTION-4 OF RFP.
- (II) Demand Draft towards cost of RFP of Rs. 5,000/- (Rupees Five thousand only) in favour of Regional Pay and Accounts Officer (NH), Mumbai payable at Mumbai;
- (III) Bid Security (For the amount given in section 1 of this document) in the form of a Bank Guarantee and the format specified in this document in favor of Regional Officer MoRTH, Mumbai. The BG issuing bank bidder is requested to send bank guarantee confirmation through SFMS gateway directly to following bank account of Employer (Ministry of Road Transport and Highways)-
- Bank Account No - 50003100000092
 Name of Bank Account- PAO(NH)MUMBAI
 Account Type - GOVT. ACCOUNT
 Bank & Branch Name- SYNDICATE BANK, FORT BRANCH, MUMBAI
 IFSC, CODE- SYNB0005000
 MICR CODE- 400025014
- Bidders are advised to submit the copy of Bank Guarantee confirmation message send through SFMS gateway by bidders bank to Employer's Bank.
- (IV) Bidders have to comply with the Ministry's circular no. RW/NH-37010/4/2010/PIC-EAP(Printing), dated 22nd February, 2016 regarding Adoption of Integrity pact.
- iii. The Applicant shall submit the original documents specified above in point no.4.1 (ii) B together with their respective enclosures and seal it in an envelope and mark the envelope as "Technical Proposal" for the Project for which proposal is submitted and name and address of the Applicant. The envelope must be clearly marked **"DO NOT OPEN, EXCEPT IN THE PRESENCE OF THE EVALUATION COMMITTEE"**. In addition, the Application due date should be indicated on the right hand corner of the envelope. The original documents should be submitted before **17:00 hours Indian Standard Time on 14.11.2018**, at any of the below mentioned address in the manner and form as detailed in the RFP. A receipt thereof should be obtained from the below mentioned person.

Shri Anshumali Srivastava Regional Officer (Maharashtra & Goa) Regional Office, Mumbai Ministry of Road Transport & Highways Room 508 & 509 5th Floor, Konkan Bhawan CBD Belapur Navi Mumbai	Shri V.S.Deshpande Chief Engineer (NH) Public Works Department 5th Floor Konkan Bhawan CBD Belapur Navi Mumbai	Shri P.S.Mandpe Joint Managing Director-III MSRDC Bandra Worli Sea Link Office Reclamation, Bandra Mumbai
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- iv. The Applicant shall upload scanned copies of the Technical Proposal and Financial Proposal as specified in point nos. **4.1 (ii) A & B** above on the E-tendering portal of Employer before **17:00 hours Indian Standard Time** on the Application due date i.e. on **13.11.2018**. Hard copy of the documents as specified in point nos. **4.1 (ii) B** above only is required to be submitted. Financial Proposal is to be submitted On-line only and no hard submission is to be made. In the event of any discrepancy between the original and the copy (in electronic form), the original shall prevail.

4.2 Modification / Substitution/ Withdrawal of bids:

- (i) The Bidder may modify, substitute or withdraw its e- bid, prior to the Bid Due Date. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date.
- (ii) Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the Employer, shall be disregarded.
- (iii) For modification of e-bid, bidder has to detach its old bid from e-tendering portal and upload / resubmit digitally signed modified bid.
- (iv) For withdrawal of bid, bidder has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.
- (v) Before withdrawal of a bid, it may specifically be noted that after withdrawal of a bid for any reason, bidder cannot re-submit e-bid again.

4.3 OPENING AND EVALUATION OF APPLICATIONS:

- (i) Opening of Proposals will be done through online for Financial Proposal and both on-line and manually for Technical Proposal.
- (ii) For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the bid shall be considered non-responsive.

The Employer shall open Envelope containing Technical Proposal received as mentioned in point nos. **4.1 (ii) B** **at 11:00 hours Indian Standard Time on the bid opening date i.e. 15.11.2018** in the presence of the Applicants who choose to attend. The Employer will subsequently open the Technical Proposal as mentioned in point no. **4.1 (ii) A(a)** above and evaluate the Applications in accordance with the provisions set out in the RFP.

- (iii) The Financial Proposal **4.1 (ii) A (b)** will be opened of the short listed applicants who qualify for financial opening as per RFP. The date of opening of Financial Proposal will be notified later on.

5 PROPOSAL EVALUATION

- 5.1 A two -stage procedure shall be adopted for evaluating the proposals.

- 5.2 Deleted

Technical Proposal

- 5.3 The Evaluation Committee appointed by the Employer 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 (S_T.) Only those Applicants whose Technical proposal score 75 marks or more out of 100 shall qualify for further consideration.

However, if the number of such pre-qualified applications is less than two, the Employer may, in its sole discretion, pre-qualify the applicant(s) whose technical score is less than 75 marks.

Financial Proposal

- 5.4 After the evaluation of Technical Proposals is completed and the shortlist of firms is finalised, the Employer may notify those consultants whose proposals were not considered as per conditions of RFP. The Employer shall simultaneously notify the shortlisted firms indicating the date and time set for opening of the Financial Proposals.
- 5.5 The Financial Proposals shall be opened publicly in the presence of the consultants' 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. The Client shall prepare minutes of the public opening.
- 5.6 The Evaluation 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.) and without computational error. 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.
- 5.7 The lowest financial proposal (F_M) will be given a financial score (S_F) of 100 points. The financial scores of other proposals will be computed as follows:

$$S_F = 100 \times F_M / F$$
(F = amount of financial proposal)
- 5.8 Proposals will finally be ranked according to their combined technical (S_T) and financial (S_F) scores as follows:

$$S = S_T \times T_w + S_F \times F_w$$
Where S is the combined score, and T_w and F_w are weights assigned to Technical Proposal and Financial Proposal, that shall be 0.80 and 0.20 respectively.
- 5.9 The selected Consultant shall be the first Ranked Applicant (H-1, having the highest combined score). The second ranked applicant (H-2) shall be kept in reserve and may be invited for negotiation in case the first ranked Applicants withdraws, or fails to comply the requirements specified in this document. In the event the proposals of two or more consultants have the same scores in the final ranking, the proposal with the highest technical score should be ranked first.

6 NEGOTIATIONS

- 6.1 Prior to the expiration period of validity of proposal, the Employer shall notify the successful firm who submitted the highest scoring proposal 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. In case two or more firms obtain same score, the firm achieving the highest Technical score shall be invited first for negotiations.
- 6.2 Negotiations normally take one to two days. The aim is to reach agreement on all points, and initial a draft contract by the conclusion of negotiations
- 6.3 In case of 1st round of negotiation is not held within 180 days from the Bid Receipt Date due to reasons attributable to Employer, the selected consultant (H-1) shall be permitted for replacement upto a maximum of 50% key personnel with key personnel of equivalent or

better qualifications without considering the same as replacement and without any deduction. However, for avoidance of doubt, it is clarified that replacement of key personnel whose CV has scored less than 75% marks shall continue be considered as replacement as per para 3.4.(iv) (f). Further, it is also clarified that any key personnel, if debarred during the period between receipt of bid and award of the contract and is required to be replaced as per the provisions of the RFP, then the replacement shall not be considered as part of replacement by the consultant and hence no deduction in remuneration shall be affected. However, in this case the original CV will be considered for evaluation purpose.

- 6.4 Negotiations shall commence with a discussion of your technical proposal, the proposed methodology (work plan), staffing. Agreement must then be reached on the staffing and bar charts, which shall indicate activities, staff, periods in the field and in the home office, staff months, logistics and reporting. Special attention shall be paid to optimise 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.
- 6.5 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 in the Client's country, 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.
- 6.6 Having selected a firm, among other things, on the basis of an evaluation of proposed key professional staff, the Employer's 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.
- 6.7 Replacement of key personnel shall be considered only in unavoidable circumstances. In no case more than two replacements of key personnel shall be permitted during negotiation and in such cases Consultant and such key personnel shall have to submit affidavit to the effect that during the period of assignment specified in para 8 of Section:1, the replaced key personnel shall not be professionally employed anywhere in Employer's works. Employer shall not further consider CV of such key personnel directly or indirectly for any of its projects for this period. The reduction in remuneration of such replacements shall be 5% and 10% for 1st replacement and 2nd replacement respectively within validity period of bid. In case during negotiations held within validity period of bid, more than two replacements are sought by the H1 consultant, his proposal shall be considered as Non-Responsive. In such case the combined score of remaining technically qualified firms, meeting the non-conflict condition shall be evaluated to arrive at new H1. In case during interaction with the key personnel at the time of negotiation it is found that the key personnel proposed is un-suitable for the assignment position, his replacement by equivalent or better shall be provided by the consultant. The key personnel with such un-suitable CV shall not be considered in any future bids for that position for two years. No deduction for such replacement who are not found suitable during interaction shall be made. In the eventuality that a firm becomes non-responsive, for the third time, due to the action of replacements of more than 2 key personnel during negotiation, the firm and its constituent JV partners and Associates shall be debarred upto one year for Employer's consultancy projects.
- 6.8 Each key personnel of the preferred consultant shall be called for interview at the time of

negotiation at the cost of the Consultant. 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 The successful firm with whom the contract is signed is expected to commence the assignment on the date and at the location specified in the data sheet.

DATA SHEET
(As Mentioned in Letter of Invitation to Consultants)

Sub clause No. in Letter of Invitation to Consultants

1.1 Pre-Proposal Conference shall be held at: Employers office on 26.10.2018 at 12.00 hrs.

1.2 The proposal shall be valid for 120 days after the last date of submission.

2.1 Clarification may be requested up to 7 day prior to Pre-Proposal Conference. The address for requesting clarification is:

Shri Anshumali Srivastava
Regional Officer (Maharashtra & Goa)
Regional Office, Mumbai
Ministry of Road Transport & Highways
Room 508 & 509
5th Floor, Konkan Bhawan
CBD Belapur, Navi Mumbai

3.1 The Language of documents and correspondence will be English

3.2 All the personnel shall have working knowledge of English and all the reports etc shall be written in English.

3.3 Employer shall pay only Goods and service tax (as applicable). Consultant has to assess all other taxes and should in-built them in their financial proposal. These taxes (other than service tax) should not be provided separately. Consultants are requested to consult Tax Consultants for details.

3.4 The Consultants to state all cost in Indian Rupee only.

4. The time and date of submission: **1700 hrs on 13.11.2018 .**

5.1 The points assigned to Technical Evaluation criteria are:

S. No.	Description	Marks
1	Relevant experience for the assignment	25
2	Qualifications and competence of the key staff for the assignment	75
	Total	100

(i) Sub criteria for Relevant Experience of the firm for the assignment

Criteria	Marks
Year of establishment of the firm (in case of JV year of establishment of Lead member shall be considered)	2
Average Annual Turnover (last 3 years) from consultancy business	2
Firm should also have experience of Project Supervision/Independent Engineer/Authority Engineer of at least one project of similar category of Tunnel work of 0.7 km.	16
Experience in Construction Supervision/Independent Engineer/Authority Engineer in similar category of Tunnel** work of 0.7 km of similar category for which RFP invited of 2/4/6*-laning or more / bridge works in last 12 years*	

Experience in DPR preparation/ Feasibility Study cum Preliminary Design Report for Number similar category of Tunnel** work of 0.7 km of similar category for which RFP invited of 2/4/6*-laning or more / bridge works in last 12 years *	5
Total	25

** 4/6 lane Tunnel Works for road will be considered as applicable for the project for which the RFP is invited. For standalone Tunnel projects, experience in Tunnel work (either standalone project or as a part of road/rail project) only be considered. The experience of 2 lane road tunnel projects/tunnel projects of metro or road will be considered for 4/6 laning tunnel projects with a multiplication factor of 0.4.

*Similar project means 2/4/6 lane as applicable for the project for which RFP is invited. For 2-lane projects experience of 4/6 lane also to be considered with a multiplication factor of 1.5. Experience of 4/6 lane shall be considered interchangeably for 4/6 laning projects. Experience of 2 lane will be considered for 4/6 laning projects with a multiplication factor of 0.75. For standalone bridge projects, experience in bridge work (either standalone project or as a part of road project) only be considered.

In case of JV the turnover and experience details of Lead and JV partners will be added for evaluation. Credentials of associate firm, except key personnel, if any will not be considered for evaluation. However consultant should submit details as per section 3, separately for Lead partner JV partner and associate.

Employer's certificate should be submitted substantiating the experience claimed by the firm.

- (ii) Deleted
- (iii) Qualification and competence of following professional/sub-professional staff for the assignment shall be evaluated. The weightage for various key staff are as under:-

S.No.	Staff Position	Marks
1	Team Leader Cum Senior Tunnel Expert	15
2	Geotechnical Expert	8
3	Tunnel Design Engineer	8
4	Tunnel Safety Expert	8
5	Tunnel ventilation Cum E&M expert	5
6	Geologist	5
7	Contract Specialist	3
8	Instrumentation & Control (SCADA) Experrt	5
9	Highway Engineer	7
10	Bridge Structural Engineer	6
11	Material Engineer	5
	Total	75

Sub criteria for qualification of key Personnel (i.e. Professional staff)

General qualifications	25
Adequacy for the project	70
Employment with firm	5

Total	100
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The technical proposal should score at least 75 marks to be considered responsive for financial evaluation.

Qualification and Evaluation Criteria for Team Leader cum Bridge/Structural Engineer and Highway Engineer in case of Specialized Bridge shall be suitably inserted by the concerned technical division while inviting RFP.

5.2 Sub Criteria for Employment with firm

Mark for Employment with Firm

- (i) Permanent staff (those already employed with the firm prior to one year from the month during which this Tender Notice is issued) will get marks as following

- < 1 year - 0 marks
- > 1 year to 2 years - 3 marks
- > 2 years to 3 years - 4 marks
- > 3 years - 5 marks

Retainer/non-permanent staff = Zero Marks

5.3 Evaluation criteria, self-evaluation and declaration of result of Technical Evaluation on website:

- (i) Detailed evaluation criteria which is to be used for evaluation of technical bids is enclosed as Appendix-EC.
 - (ii) The Consultant should carry out self-evaluation based on the evaluation criteria at Appendix-EC. While submitting the self-evaluation along with bid, Consultant shall make references to the documents which have been relied upon in his self-evaluation.
 - (iii) Result of technical evaluation shall be made available on the website giving opportunity to the bidders to respond within 7 days in case they have any objection.
6. Commencement of Assignment: The firm shall begin carrying out the services within one month of signing of the Consultancy Agreement.

SECTION 3. FORMATS FOR SUBMISSION OF FIRMS CREDENTIALS

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

- Year of Establishment of Firm
- Average annual turnover (last three years)

Note: The Firm shall submit Certificate of Incorporation and audited balance sheet for the last three years (FY 2014-2015, FY 2015-2016 and FY 2016-2017). For claiming experience of Highway projects, completion certificate from employer should be enclosed. The proposal should also contain the details of the key personnel viz. their name, qualification, expertise area, experience and years of association with the firm.

Appendix A

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

- (i) Name of the package applied for :
- (ii) Year of establishment of firm *

Consultant	Year of Establishment	Country	Type of Organization			
			Individual	Partnership	Corporatio	Other
Individual / Lead Partner (of JV)/ Minor Partner of JV/ Associate						

(NOTE:- Year of Establishment of Lead Partner of JV shall be considered.

*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/e-mail.
- (vi) Financial Statement of the last three years. **

Sl. No.	Particular	2014-15	2015-16	2016-17
i.	Annual turnover from Consulting business			
ii.	Total Assets			
iii.	Current Assets			

c) Balance Sheet/ Auditor Certificate of last 3 years (FY 2014-2015, FY 2015-2016 and FY 2016-2017) shall be submitted as evidence of Annual Turnover.

**a) The amount shall be stated in INR. (Consider 1US Dollar = Rs. 72.66 and 1 Euro = Rs.85.52)
(This will be the exchange rates as per Reserve Bank of India rounded off to nearest Rupee applicable

b) The currency conversion rate for the respective years shall be mentioned for other international currencies.

- vii. Experience as Independent Consultant/Construction supervision of Highway projects and tunnel, separately for PPP and non-PPP Projects during the last 12 years. ***

S No	Projects	Type of Services rendered	Description of Highway Project/ Length (kms)	Client (with complete address, contact person, telephone Nos. and Fax Nos.)	Total Fee for the Consultancy Assignment (INR)	Fee received by Applicant (in case of JV/ Association)	%age of total fee received by the firm	Approx. cost of Highway Project	Period
1	2	3	4	5	6	7	8	9	10
		A. Completed / Substantially completed projects: 1. 2. 3. B. Projects in progress: 1.							

Note: Substantially completed projects are those which are 90% or more complete in terms of physical progress only as certified by Authority/Client and can be put to use safely. Those projects shall also be considered where the provisional completion certificate for the project has been issued and the Authority/Client has certified that the project highway has been safely put to use of the road users.

- viii. Experience in DPR/ Feasibility Study cum Preliminary Design Report preparation of 2/4/6 laning / Bridge Highway / tunnel Projects separately for the PPP and non-PPP projects during the last 12 years. ***

S No	Projects Name	Type of	Length	Client	Total Fee for	Fee received	%age of total	Period
	/							

	Sole Consultant/ Prime consultant of JV / minor consultant of JV/ / as associate consultant	Services Rendered	of Project (kms)	(with complete address, contact person, telephone Nos. and Fax Nos.)	the Consultancy Assignment (INR)	by Applicant (in case of JV/ Association)	fee received by the firm	
1	2	3	4	5	6	7	8	9

- ***a) 2/4/6 lane/Bridge work as applicable for the project for which RFP is invited. For 2-lane projects experience of 4/6 lane also to be considered with a multiplication factor of 1.5. Experience of 4/6 lane shall be considered interchangeably for 4/6 laning projects. Experience of 2 lane will be considered for 4/6 laning projects with a multiplication factor of 0.75. For standalone bridge projects, experience in bridge work (either standalone project or as a part of road project) only be considered.
- b) Only those projects, to be included in the table which are Highways Projects/tunnel and for which clients certificates from the concerned Government agencies are enclosed with the proposal.
- c) The details of bridges having length more than 200m (500m in case the project consist of bridges of length more than 500m) in the listed projects is to be specifically mentioned.
- d) The weightage given for experience of a firm would depend on the role of the firm in the respective assignments. The firm's experience would get full credit if it was the sole firm in the respective assignment. If the applicant firm has completed projects as JV with some other firms, weightage shall be given as per the JV share***. However if the applicant firm has executed the project as associate with some other firms, 25% weightage shall be given to the applicant firm for the projects completed under such association
- e) For weightage of experience in any past Consultancy assignment, experience certificate from the client shall be submitted. In absence of clear demarcation of JV share in client certificate, the weightage will be treated as 60 % for lead partner and 40% for minor partner. Annual turnover duly certified by Chartered Accountant shall be accepted. In case of non-availability of such documents no weightage of turnover/experience will be considered.

(ix) Assignments on hand including those for which the Letter of Acceptance from the clients received as on 7 days prior to due date for submission of proposals: The details shall be given in the following format.

S. No	Name of Client Assignment	Role of the firm					Team Members provided by the firm
-------	---------------------------	------------------	--	--	--	--	-----------------------------------

			Sole, Lead/ Other in JV or sub- consultant	Date of letter of Acceptance	Date of Agreement if signed	Present status of Assignment			
							Name	DOB	Position
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

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 and on data, services, and facilities to be provided by the
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 member
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	Affidavit for correctness of CVs of key personnel and experience claimed by the firm.

APPENDIX B-1**Technical proposal submission form.**

FROM (Name of Firm)

To: (Name and Address of Client)

Ladies/Gentlemen:

Subject: Consultancy Services for Authority's Engineer For Rehabilitation and upgradation of Kashedi Ghat section of NH-17 [New NH No. 66] to four-lanes with paved shoulders from existing km 148/0 to km 161/600 [Design km 149+510 to km 158+467] including construction of twin-tube six-lane tunnel through an Engineering, Procurement and Construction (EPC) Contract under NHDP-IV in the state of Maharashtra.

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

We understand that Employer shall be at liberty to keep the credentials of Consultants submitted at bidding stage, in public domain and the same may be uploaded by Employer on official website of Employer. We undertake that we shall have no objection if Employer uploads/hosts the information pertaining to credentials of our firm as well as of our key personnel.

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.

2. My/Our registration No. on Infracon is and my/our Infracon Team ID is

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

We remain,

Yours sincerely,

Managing Director/Head of the firm/ Authorised
Representative of the firm + *

Name of the firm

Address

*Lead Member in case of JV

APPENDIX B-2: COMMENT AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON SERVICES AND FACILITIES TO BE PROVIDED BY THE EMPLOYER

On the Terms of Reference (not more than one page):

1.

2.

3.

4.

....

On the services and facilities to be provided by the Employer (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. Technical/Managerial Staff

Sl. No.	Name	Position	Task
1			
2			
3			
4			

2. Support Staff

Sl. No.	Name	Position	Task
1			
2			
3			
4			

APPENDIX B-5 :**FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED
PROFESSIONALSTAFF****Proposed Position :****Name of Firm :****Name of Staff :****Profession :****Date of Birth :****Years with Firm/Entity :** **Nationality :****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.]

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.]

Please attach printout of CV along with all the relevant details uploaded on infracon portal.

PART - A

Please provided following details for the proposed key-personnel from current period to start of employment in chronological order . Within each employer/period the details are to be provided project wise. in case the applicant was deployed in more than one project during any period / duration, this should be clearly brought out .

Project Index No. -

<u>Period from</u>	<u>Period to</u>	
<u>Name of employer</u>		
<u>Name of the Project</u>		
<u>Client for the project</u>		
<u>Project Description</u> (give details of 2/4/6 lane lengths involved , details of structures involved as required in evaluation criteria)		
<u>Designation</u> <u>/position held in</u> <u>Project</u>		

Is the position held is similar to the position required in RFP for this position	Yes/no (give reasons why)		
Duties and responsibility of key-personnel in the project			
Eligibility of above project as per sub criteria:			
Sub-Criteria No. as per appendix EC for the key-personnel (adequacy for the project)	Relevant qualifying year for this project (No. of months)	Relevant qualifying Project Number (1 or 0 ; 1 for Yes & 0 for No)	Mention Project serial Number if this Project, is overlapping with any other Project

PART-B

2. After completion of details for all projects, provide summary of evaluation as below to arrive at marks for CV:-

Sub-Criteria No. & name as per appendix EC (Adequacy for the project) for key-personnel	Relevant qualifying duration (No. of months) / for all qualifying projects combined	Relevant qualifying Number of Projects in this category	Project Index Number(s) fulfilling this criteria

Certification by the Candidate

I, the undersigned, (Name and Address) undertake that this CV correctly describes myself, my qualifications and my experience and Employer would be at liberty to debar me if any information given in the CV, in particular the Summary of Qualification & Experience vis-à-vis the requirements as per TOR is found incorrect. I further undertake that I have neither been debarred by MoRTH, NHAI or any other central/stage government organization nor left any assignment with the consultants engaged by Employer / contracting firm (firm to be supervised now) for any

continuing work of Employer without completing my assignment. I will be available for the entire duration of the current project (named.....). If I leave this assignment in the middle of the work, Employer would be at liberty to debar me from taking any assignment in any of the Employer works for an appropriate period of time to be decided by the Employer. I have no objection if my services are extended by the Employer for this work in future.

I further undertake that my CV is being proposed for this project by ----- (the applicant firm) and I have not given consent to any other consultant(s) to propose my CV for any position for this project.

I further undertake that if due to my inability to work on this project due to unavoidable circumstances, due to which consultant's firm is forced to seek replacement. In such unavoidable circumstances, I shall not undertake any employment in Employer projects during the period of assignment of this project and Employer shall consider my CV invalid till such time.

I undertake that I have no objection in uploading/hosting of my credentials by Employer in public domain.

For Key Personnel having intermittent inputs, add the following:

I further certify that I am associated with the following assignments as on date (as on 7 days prior to due date for submission of proposal) including those for which LOA has been received by the firm and the inputs in these assignments shall not effect the work of the current assignment.

Name of Assignment	Client	Date of LOA	Likely start (Month / Year)	Likely end (Month / Year)	Total input of the person (man-months)

Note : CVs of Key Personnel having intermittent inputs will be considered only if the assignments on hand as on 7 days before due date of proposal including those for which LOA has been received from the Client or for which Consultant has been declared as H1 do not exceed 3 (three) for Tunnel Design Engineer, Tunnel Safety Expert, Tunnel Ventilation cum E&M Expert, Senior Geologists and Contract Specialist.

.....
(Signature of Key Personnel)

Date

(Day/Month/Year)

The Consultant should carryout self-evaluation based on the evaluation criteria at Appendix-EC and furnish the same here. While submitting the self-evaluation along with bid, Consultant shall make references to the documents which have been relied upon in his self-evaluation.

Certification by the firm

The undersigned on behalf of -----(name of consulting firm) certify that Shri----- (name of proposed personnel) to the best of our knowledge has neither been debarred by MoRTH / NHAI or any other Central/State Government organization nor left his assignment with any other consulting firm engaged by the Employer / Contracting firm (firm to be supervised now) for the ongoing projects. We understand that if the information about leaving the past assignment is known to the Employer, Employer would be at liberty to remove the personnel from the present assignment and debar him for an appropriate period to be decided by the Employer.

.....

Date :

(Day/Month/Year)

[Signature of authorized representative of the Firm]

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 as specified.**
- f) Experience Certificates from Employers to be attached.**

However, where experience certificate is not available, a self-declaration in this regard as to the authenticity of the information furnished in the CV may be uploaded

APPENDIX B-6: TIME SCHEDULE FOR PROFESSIONAL PERSONNEL**A. Activity Schedule**

Sl. No.	Name	Position	Monthwise Program (in form of Bar Chart) <i>[1st, 2nd, etc. are months from the start of assignment]</i>												
			1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th and subsequent year	Number of Months
1															Subtotal (1)
2															Subtotal (2)
3															Subtotal (3)
4															Subtotal (4)
-															-
-															-

APPENDIX B-7 : ACTIVITY (WORKS) SCHEDULE**A. Activity Schedule**

		Monthwise Program (in form of Bar Chart)											
		<i>1st 2nd etc are months from the start of</i>											
Sl.	Item of Activity (Works)	1 st	2 ⁿ	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

S.No	Reports :	Programme : (Date)
1	Monthly reports (Design and Construction)	
2	Quarterly Reports	
3	Various others reports as provided in the Concession Agreement such as Completion Report	

**APPENDIX B-8: AFFIDAVIT FOR CORRECTNESS OF CV OF KEY PERSONNEL
AND EXPERIENCE CLAIMED BY THE FIRMS
(To be submitted on non-judicial Stamp Paper)**

I, the undersigned, on behalf of _____ (name of the Consultant submitting the proposal), do hereby certify that the details furnished in this proposal including CV of key personnel and experience claimed by the firm/firms are true and correct to the best of my knowledge and belief.

**Managing Director/Head of the
Firm/Authorised Representative of
the firm***

Address

***Lead Member in case of JV**

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 :****Address of Employer**

Subject: Consultancy Services for Authority's Engineer For Rehabilitation and upgradation of Kashedi Ghat section of NH-17 [New NH No. 66] to four-lanes with paved shoulders from existing km 148/0 to km 161/600 [Design km 149+510 to km 158+467] including construction of twin-tube six-lane tunnel through an Engineering, Procurement and Construction (EPC) Contract under NHDP-IV in the state of Maharashtra.

We, the undersigned, offer to provide the consulting services for the above in accordance with your Request for Proposal dated [Date], and our proposal. Our attached financial proposal is for the sum of [Amount in words and figures]. This amount is exclusive of the local taxes which we have estimated at (Amount in Words and Figures).

Our financial proposal shall be binding upon us subject to the modifications resulting from 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 Currency	Purpose of Commission or Gratuity
-------------------------------	------------------------	--------------------------------------

.....

.....

.....

.....

.....

.....

We understand you are not bound to accept any proposal you receive.

We remain,
Yours sincerely,

**Managing Director/Head of the
firm/Authorised Representative of the
firm***

Name of the firm

Address

*Lead Member in case of JV

APPENDIX C-2 : SUMMARY OF COSTS

No.	Descriptio	Amount (Rs.)
I	Remuneration for Local Professional Staff	
II	Supporting Staff	
III	Transportation	
IV	Duty Travel to Site	
V	Office Rent	
VI	Office Supplies, Utilities and Communication	
VII	Office Furniture and Equipment	
VIII	Reports and Document Printing	
IX	Survey Equipment with Survey Party and Vehicle	
X	Contingencies	
	Consultancy Services Tax Payable in India	
	Total Costs (Including Tax)	

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

APPENDIX C-3 : BREAKDOWN OF COSTS**I. REMUNERATION FOR LOCAL PROFESSIONAL STAFF**

S. No.	Key Personnel	Man-month in Construction period of 30 months	Man-month in Maintenance/Defect Liability period of 48 months	Billing Rate (Rs)	Amount (Rs)
<u>A: Key Personnel</u>					
1.	Team Leader Cum Senior Tunnel Expert*	30	12*		
2.	Geotechnical Expert	15	3		
3.	Tunnel Design Engineer	18	1		
4.	Tunnel Safety Expert	18	12		
5.	Tunnel ventilation Cum E&M expert	6	3		
6.	Geologist	10	4		
7.	Contract Specialist	15	6		
8.	Instrumentation & Control (SCADA) Expert	6	2		
9.	Highway Engineer	30	6		
10.	Bridge/Structural Engineer	20	2		
11.	Material Engineer	30	2		
	Sub Total	198	53		
<u>B: Sub Professional Staff</u>					
1.	Tunnel Engineer (1 Nos *30)	30	0		
2.	Geologist (1 Nos *30)	30	0		
3.	Quantity Surveyor (1 Nos *30)	30	3		
4.	Highway Design Engineer	6	0		
5.	Bridge Design Engineer	6	0		
6.	Tunnel Safety Engineer	30	24		
7.	Environmental Expert	6	4		
8.	Lab Technician (1 Nos *30)	30	6		
9.	CAD EXPERT	3	0		
10.	Survey Engineer	10	6		
	Sub Total	181	43		

*12(Including 6 months Continuous input of TL after project completion during maintenance period)

TBN = To Be Named

Support Staff

No.	Position	Name	Staff Months	Rate/ month ()	Amount (Rs)
1.	Office Manager	TBN	30 + 48 months=78 months		
2.	Accountant cum cashier	TBN	30 + 48 months=78 months		
3	Photocopy Machine Operator	TBN	30 + 48 months=78 months		
4.	Computer Operator cum steno	TBN	30 + 48 months=78 months		
5.	Office Boy	TBN	30 + 48 months=78 months		
				Total :	

Note :

III. Transportation (Fixed rate on rental basis)

S.No	Description of Vehicles	Qty. (No. of vehicle-month)		Total	Rate/ Vehicle - Month	Amount
		During Construction Period	During Maintenance / DLP Period			
1	Innova / Scorpio or equivalent (not more than 3 years old)	2x30 months= 60 months	1X48	108		
2	Ambassador / Indica or equivalent (not more than 3 years old)	1x 30 months= 30 months	1X48	78		
	Total					

IV. Duty Travel to Site (Fixed Costs) (For single or 2 projects clubbed together) : Professional and Sub-Professional Staff

The employer may require the Key Personnel to visit the Employer's Site/Regional office . The quoted amount should include travel fare for 20 round trip to Employer's Head Office and 20 round trip to Employer's regional office (including Hotel charges, travel costs etc. Complete) .

V. Office Rent (Fixed Costs)- Minimum 400 sqm area of office shall be rented. Consultant are permitted to open more than one office as per no. of civil packages involved. However, the total office area for all offices combined, should not be less than 400 sqm.

The rent cost includes electricity and water charges, maintenance, Cleaning, repairs, etc. complete.

Nos of Months	Rate/month	Amount
(Construction period + 48 months)		

VI. Office Supplies, Utilities and Communication (Fixed Costs)
(for Single project or 2 projects clubbed together)

No	Item	Months	Monthly Rate	Amount in Rs.
1.	Office Supplies	Construction period + 48 months		
2.	Drafting Supplies	Construction period + 48 months		
3.	Computer Running Costs	Construction period + 48 months		
4.	Domestic and International Communication	Construction period + 48 months		

VII. Office Furniture and Equipment (Rental) [Fixed monthly cost]
(for Single or two projects clubbed together)

(Brand new Furniture and Equipment shall be mandatory at the time of commencement of services as per the list given below. The rental rate per month shall be quoted for the total list of Office Furniture and Equipment)

No.	Description	Unit	Qty.	Rate/ Month /unit (Rs.)	Period in Months	Amount (Rs.)
	Office Furniture (Rental/Hire)					

No.	Description	Unit	Qty.	Rate/ Month /unit (Rs.)	Period in Months	Amount (Rs.)
1	Executive Table (Godrej make, model No. T-108 or equivalent)	each	11		78	0
2	Executive Chairs (Godrej make, model No. PCH-701 or equivalent)	each	11		78	0
3	Tables (Godrej make, model No. T-104 or equivalent)	each	10		36	0
4	Ordinary Chairs Type-1 (Godrej make, model No T-CHR -6 or equivalent)	each	10		36	0
5	Tables (for all other staff) (Godrej make, model No. T-101 or equivalent)	each	4		36	0
6	Ordinary Chairs -Type II (for all other staff) (Godrej make, model No. CHR-6 or equivalent)	each	10		36	0
7	Steel Almirah 1270mm x 765mm x 440mm (Godrej make, model minor plain or equivalent)	each	6		78	0
8	Visitors chairs/Conference room chairs (Godrej make, model No. DCH7004 or equivalent)	each	6		36	0
9	Tables for computers with 3 drawers, key board/mouse pull out trays size 1664mm x 900 (Godrej make. Or equivalent as per Engineer's design)	each	4		36	0
10	Printer desks (Godrej make or equivalent)	each	2		36	0
11	Side tables (Godrej make or equivalent)	each	4		36	0
12	Conference Table (Godrej make, model No.T-12 or equivalent)	each	1		36	0

No.	Description	Unit	Qty.	Rate/ Month /unit (Rs.)	Period in Months	Amount (Rs.)
13	Revolving Chairs for Computer Room/Drawing room	each	5		36	0
	Office Equipment (Rental/Hire)					
1	Telephone with PABX facilities (2 external lines & 10 internal lines)	each	2		78	0
2	Photocopier	each	1		78	0
3	Fax	each	1		78	0
4	Air-Conditioner (1.5 Ton)	each	3		78	0
5	Computer PC (state of the art)	each	4		78	0
6	Laser Jet Printers	each	3		78	0
7	Diesel Generator (20 KVA) with running cost	each	1		78	0
8	Binding Machine	each	1		78	0
9	Air Cooler (of 24" size fan with suitable pump and shall be of either GEC, Khaitan or Cool Home make or equivalent)	each	2		78	0
10	Water Coolers (Voltas or equivalent)	each	1		78	0
11	Software	LS	LS		78	0
	TOTAL					0

VIII. Reports and Document Printing

(for Single project or two projects clubbed together)

No.	Description	No. of Reports	No. of Copies per Report	Total Nos. Of copies	Rate per Copy ()	Amount
1	Monthly reports	(30 + 48 months)= 78	6	468		

2	Quarterly Reports	26	6	156		
3	Various others reports as provided in the EPC Agreement such as Completion Report	5	6	30		
				Total		

(The submission of reports shall be as per guidelines and format issued vide Ministry's letter no. NH-15017/36/2016-P&M(SPZ), dated July, 12, 2016 " Standardisation of reporting responsibility of Independent Engineers (IEs)/ Authority's Engineers (AEs) for NH Projects. The above reports are to be submitted separately for each civil contract section included in AE services. Submission of each type of reports mentioned at Sl. 1,2,3 above for each of the civil contract section will signify one type of report under this clause for payment purposes. E.g. for AE package comprising 2 civil contract sections, 1 monthly report will be comprising of monthly report of each of 2 sections.)

IX. Survey Equipment with Survey Party and Vehicle etc complete
(for Single project or two projects clubbed together)

Description	Nos. of Months	Rate /month	Amount
Rental cost towards Survey Equipment (GPS/Total station /Auto Level) with semiskilled survey Party (4 persons) and one dedicated vehicle for Survey Party (inclusive of vehicle rental driver's salary, fuel operation and maintenance etc complete) with rods, flags and other sundries	30		

X. Contingencies

A fixed amount of Indian Rupees ONE MILLION shall be included in the Financial Proposal. The provisions of Contingency shall be operated with the specific approval form the Authority.

SECTION 6: TERMS OF REFERENCE FOR AUTHORITY'S ENGINEER**1. Scope**

1.1 These Terms of Reference (the "**TOR**") for the Authority's Engineer are being specified pursuant to the EPC Agreement dated (the "**Agreement**"), which has been entered into between the Authority and (the "**Contractor**") for [Two-Laning] of the **** section (km ** to km**) of National Highway No. ** in the State of *** on Engineering, Procurement, Construction (EPC) basis, and a copy of which is annexed hereto and marked as Annex-A to form part of this TOR.

1.2 The TOR shall apply to construction and maintenance of the Project Highway/tunnel.

2 Definitions and interpretation

2.1 The words and expressions beginning with or in capital letters and not defined herein but defined in the Agreement shall have, unless repugnant to the context, the meaning respectively assigned to them in the Agreement.

2.2 References to Articles, Clauses and Schedules in this TOR shall, except where the context otherwise requires, be deemed to be reference to the Articles, Clauses and Schedules of the Agreement, and references to Paragraphs shall be deemed to be references to Paragraphs of this TOR.

2.3 The rules of interpretation stated in Clauses 1.2, 1.3 and 1.4 of the Agreement shall apply, *mutatis mutandis*, to this TOR.

3 General

3.1 The Authority's Engineer shall discharge its duties in a fair, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

3.2 The Authority's Engineer shall perform the duties and exercise the authority in accordance with the provisions of this Agreement, but subject to obtaining prior written approval of the Authority before determining.

(a) any Time Extension.

(b) Any additional cost to be paid by the Authority to the Contractor;

(c) The Termination Payment; or

(d) Any other matter which is not specified in (a), (b) or (c) above and which creates an obligation or liability on either Party for a sum exceeding Rs. 5,000,000 (Rs. Fifty lakh.)

3.3 The Authority's Engineer shall submit regular periodic reports, at least once every month, to the Authority in respect of its duties and functions under this Agreement. Such reports shall be submitted by the Authority's Engineer within 10 (ten) days of the beginning of every month.

3.4 The Authority's Engineer shall inform the Contractor of any delegation of its duties and responsibilities to its suitably qualified and experienced personnel; provided, however, that it shall not delegate the authority to refer any matter for the Authority's prior approval in accordance with the provisions of Clause 18.2 Model EPC Agreement.

3.5 The Authority's Engineer shall aid and advise the Authority on any proposal for Change of Scope under Article 13.

3.6 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Authority's Engineer shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

4 Construction Period

- 4.1 During the Construction Period, the Authority's Engineer shall review the Drawings furnished by the Contractor along with supporting data, including the geo-technical and hydrological investigations, characteristics of materials from borrow areas and quarry sites, topographical surveys, and the recommendations of the Safety Consultant in accordance with the provisions of Clause 10.1.6 of Model EPC Agreement. The Authority's Engineer shall complete such review and send its observations to the Authority and the Contractor within 15 (fifteen) days of receipt of such Drawings; provided, however that in case of a Major Bridge or Structure, the aforesaid period of 15 (fifteen) days may be extended up to 30 (thirty) days. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and Specifications and Standards.
- 4.2 The Authority's Engineer shall review any revised Drawings sent to it by the Contractor and furnish its comments within 10 (ten) days of receiving such Drawings. The review of drawing should be authenticated by Authority's Engineer.
- 4.3 The Authority's Engineer shall review the Quality Assurance Plan submitted by the Contractor and shall convey its comments to the Contractor within a period of 21 (twenty-one) days stating the modifications, if any, required thereto.
- 4.4 The Authority's Engineer shall complete the review of the methodology proposed to be adopted by the Contractor for executing the Works, and convey its comments to the Contractor within a period of 10 (ten) days from the date of receipt of the proposed methodology from the Contractor.
- 4.5 The Authority's Engineer shall grant written approval to the Contractor, where necessary, for interruption and diversion of the flow of traffic in the existing lane(s) of the Project Highway for purposes of maintenance during the Construction Period in accordance with the provisions of Clause 10.4 Model EPC Agreement.
- 4.6 The Authority's Engineer shall review the monthly progress report furnished by the Contractor and send its comments thereon to the Authority and the contractor within 7 (seven) days of receipt of such report.
- 4.7 The Authority's Engineer shall inspect the Construction Works and the Project Highway/tunnel and shall submit a monthly Inspection Report bringing out the results of inspections and the remedial action taken by the Contractor in respect of Defects or deficiencies. In particular, the Authority's Engineer shall include in its Inspection Report, the compliance of the recommendations made by the Safety Consultant.
- 4.8 The Authority's Engineer shall conduct the pre-construction review of manufacturer's reports and standard samples of manufactured Materials, and such other Materials as the Authority's Engineer may require.
- 4.9 For determining that the Works conform to Specifications and Standards, the Authority's Engineer shall require the Contractor to carry out, or cause to be carried out, tests at such time and frequency and in such manner as specified in the Agreement and in accordance with Good Industry Practice for quality assurance. For purposes of this Paragraph 4.9, the tests specified in the IRC Special Publication-11 (Handbook of Quality Control for Construction of Roads and Runways) and the Specifications for Road and Bridge Works issued by MORT&H (the "Quality Control Manuals") or any modifications/substitution thereof shall be deemed to be tests conforming to Good Industry Practice for quality assurance.
- 4.10 The Authority's Engineer shall test check at least 20 (twenty) percent of the quantity or number of tests prescribed for each category or type of test for quality control by the Contractor.

- 4.11 The timing of tests referred to in Paragraph 4.9, and the criteria for acceptance/rejection of their results shall be determined by the Authority's Engineer in accordance with the Quality Control Manuals. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Contractor for its own quality assurance in accordance with Good Industry Practice.
- 4.12 In the event that results of any tests conducted under Clause 11.10 establish any Defects or deficiencies in the Works, the Authority's Engineer shall require the Contractor to carry out remedial measures.
- 4.13 The Authority's Engineer may instruct the Contractor to execute any work which is urgently required for the safety of the Project Highway/tunnel, whether because of an accident, unforeseeable event or otherwise; provided that in case of any work required on account of a Force Majeure Event, the provisions of Clause 21.6 of Model EPC Agreement shall apply.
- 4.14 In the event that the Contractor fails to achieve any of the Project Milestones, the Authority's Engineer shall undertake a review of the progress of construction and identify potential delays, if any. If the Authority's Engineer shall determine that completion of the Project Highway/tunnel is not feasible within the time specified in the Agreement, it shall require the Contractor to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which the Project Completion Date shall be achieved. Upon receipt of a report from the Contractor, the Authority's Engineer shall review the same and send its comments to the Authority and the Contractor forthwith.
- 4.15 The Authority's Engineer shall obtain from the Contractor a copy of all the Contractor's quality control records and documents before the Completion Certificate is issued pursuant to Clause 12.4 of Model EPC Agreement.
- 4.16 Authority's Engineer may recommend to the Authority suspension of the whole or part of the Works if the work threatens the safety of the Users and pedestrians. After the Contractor has carried out remedial measure, the Authority's Engineer shall inspect such remedial measures forthwith and make a report to the Authority recommending whether or not the suspension hereunder may be revoked.
- 4.17 In the event that the Contractor carries out any remedial measures to secure the safety of suspended works and users, and requires the Authority's Engineer to inspect such works, the Authority's Engineer shall inspect the suspended works within 3 (three) days of receiving such notice, and make a report to the Authority forthwith, recommending whether or not such suspension may be revoked by the Authority.
- 4.18 The Authority's Engineer shall carry out, or cause to be carried out, all the Tests specified in Schedule-K and issue a Completion Certificate or Provisional Certificate as the case may be. For carrying out its functions under this Paragraph 4.18 and all matters incidental thereto, the Authority's Engineer shall act under and in accordance with the provisions of Article 12 and Schedule-K.

5 Maintenance Period

- 5.1 The Authority's Engineer shall aid and advise the Contractor in the preparation of its monthly Maintenance Programme and for this purpose carry out a joint monthly inspection with Contractor.
- 5.2 The Authority's Engineer shall undertake regular inspections, at least once every month to evaluate compliance with the Maintenance Requirements and submit a Maintenance Inspection Report to the Authority and the Contractor.

- 5.3 The Authority's Engineer shall specify the tests, if any, that the Contractor shall carry out, or cause to be carried out, for the purpose of determining that the Project Highway/tunnel is in conformity with the Maintenance Requirements. It shall monitor and review the results of such tests and remedial measures, if any, taken by the Contractor in this behalf.
- 5.4 In respect of any defect or deficiency referred to in Paragraph 3 of Schedule-E, the Authority's Engineer shall, in conformity with Good Industry Practice, specify the permissible limit of deviation or deterioration with reference to the Specifications and Standards and shall also specify the time limit for repair or rectification of any deviation or deterioration beyond the permissible limit.
- 5.5 The Authority's Engineer shall examine the request of the Contractor for closure of any lane (s) of the Project Highway/tunnel for undertakings maintenance/repair thereof, and shall grant permission with such modifications, as it may deem necessary, within 5 (five) days of receiving a request from the Contractor. Upon expiry of the permitted period of closure, the Authority's Engineer shall monitor the reopening of such lane (s), and in case of delay, determine the Damages payable by the Contractor to the Authority under Clause 14.5 of Model EPC Agreement

6 Determination of costs and time

- 6.1 The Authority's Engineer shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement.
- 6.2 The Authority's Engineer shall determine the period of Time Extension that is required to be determined by it under the Agreement.
- 6.3 The Authority's Engineer shall consult each Party in every case of determination in accordance with the provisions of Clause 18.5 of Model EPC Agreement.

7 Payments

- 7.1 The Authority's Engineer shall withhold payments for the affected works for which the Contractor fails to revise and resubmit the Drawings to the Authority's Engineer in accordance with the provision of Clause 10.2.4 (d) of Model EPC Agreement.
- 7.2 Authority's Engineer shall
- a) within 10 (ten) days of receipt of the Stage Payment Statement from the Contractor pursuant to Clause 19.4, determine the amount due to the Contractor and recommend the release of 90 (ninety) percent of the amount so determined as part payment, pending issue of the Interim Payment Certificate; and
 - b) within 15 (fifteen) days of the receipt of the Stage Payment Statement referred to in Clause 19.4, deliver to the Authority and the Contractor an Interim Payment Certificate certifying the amount due and payable to the Contractor, after adjustments in accordance with the provisions of Clause 19.10 of Model EPC Agreement.
- 7.3 The Authority's Engineer shall, within 15 (fifteen) days of receipt of the Monthly Maintenance Statement from the Contractor pursuant to Clause 19.6 of Model EPC Agreement, verify the Contractor's monthly statement and certify the amount to be paid to the Contractor in accordance with the provisions of the Agreement.
- 7.4 The Authority's Engineer shall certify final payment with 30 (thirty) days of the receipt of the final payment statement of Maintenance in accordance with the provisions of Clause 19.16 of Model EPC Agreement.

8 Other duties and functions

The Authority's Engineer shall perform all other duties and functions as specified in the Agreement.

9 Miscellaneous

- 9.1 A copy of all communications, comments, instructions, Drawings or Documents sent by the Authority's Engineer to the Contractor pursuant to this TOR, and a copy of all the test results with comments of the Authority's Engineer thereon, shall be furnished by the Authority's Engineer to the Authority forthwith.
- 9.2 The Authority's Engineer shall retain at least one copy each of all Drawings and Documents received by it, including 'as - built' Drawings and keep them in its safe custody.
- 9.3 Within 90 (ninety) days of the Project Completion Date, the Authority's Engineer shall obtain a complete set of as built Drawings in 2 (two) hard copies and in micro film form or in such other medium as may be acceptable to the Authority, reflecting the Project Highway/tunnel as actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Project Highway and setback lines, if any, of the buildings and structures forming part of project Facilities; and shall hand them over to the Authority against receipt thereof.
- 9.4 The Authority's Engineer, if called upon by the Authority or the Contractor or both, shall mediate and assist the Parties in arriving at an amicable settlement of any Dispute between the Parties.
- 9.5 The Authority's Engineer shall inform the Authority and the Contractor of any event of Contractor's Default within one week of its occurrence.

10. PERFORMANCE CLAUSE

Authority's Engineers shall be expected to fully comply with all the provisions of the 'Terms of Reference', and shall be fully responsible for supervising the Designs, Construction and maintenance and operation of the facility takes place in accordance with the provisions of the EPC Agreement and other schedules. Any failure of the Authority Engineer in notifying to Employer and the Contractor on non-compliance of the provisions of the EPC Contract Agreement and other schedules by the EPC Contractor, non-adherence to the provision of ToR and non-adherence to the time schedule prescribed under ToR shall amount to non-performance.

The Authority Engineer shall appoint its authorized representative, who shall issue on behalf of the AE, the Provisional Completion Certification and Completion Certificate along with the Team Leader and shall carry out any such task as may be decided by Employer. The AE shall take prior approval of Employer before issuing Provisional Completion Certification and Completion Certificate. The proposal submitted shall also include the name of the authorized representative along with the authorization letter and power of attorney.

11. CONSULTANT'S PROPOSAL

11.1 List of key personnel to be fielded by the Consultants shall be as below:

- i. Team Leader Cum Senior Tunnel Expert
- ii. Residential Engineer cum Excavation Specialist
- iii. Senior Geotechnical Expert
- iv. Tunnel Design Engineer
- v. Tunnel Safety Expert
- vi. Tunnel ventilation Cum E&M expert
- vii. Senior Geologist
- viii. Contract Specialist

- ix. Senior Highway Engineer
- x. Bridge Structural Engineer
- xi. Material Engineer
- xii. Senior Quantity Surveyor

11.2 Broad job-description and minimum qualification for key personnel mentioned above is enclosed as **Enclosure-B**. However, higher marks shall be accorded to the Candidate with higher relevant qualification and experience. All the CV's of the personals mentioned in Para 5.3 (iii) of Data Sheet shall be evaluated at the time of evaluation of technical proposal. The **age of all 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 authorised 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 Employer 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 Authority Engineer, if the Project is awarded. In case the key personnel leaves the assignment without approval of Employer, Employer would be at liberty to take any appropriate action against that key personnel including debarment. The CV submitted by selected firm/JV shall be hoisted on official website of Employer.

11.3 In addition to above, consultants are required to propose other key personnel, sub-professional staff and other field engineers as detailed in **Enclosure-A** and the minimum qualification requirements for the same is enclosed in **Enclosure-B**.

12. PERIOD OF SERVICES

12.1 The services of an Authority's Engineer will be in phases as per Contract Agreement.

12.1.1 The appointment of the Authority's Engineer shall initially be as per details given below.

Period of service (in months)	Construction period (in months)	Maintenance/DLP Period (in months)
Construction Period + 48 Months	30 months	48

The proposed manpower deployment for this period shall be matching the activities to be performed during the said period. The time frame for services during the deployment of key personnel during this period shall be as shown in **Enclosure A**.

13. PERFORMANCE SECURITY

The successful consulting firm shall have to submit a Bank Guarantee (BG) for an amount of 2.50% of the Contract Value within 15 days of issue of LOA. The BG

shall be valid for a period of 2 months beyond the expiry of the Contract period. The BG shall be in the format specified in Appendix H of draft contract form and furnished from a Nationalised Bank, IDBI or ICICI/ICICI Bank/Foreign Bank/EXIM Bank / Any Scheduled Commercial Bank approved by RBI having a net worth of not less than 500 crore as per latest Annual Report of the Bank. In the case of a Foreign Bank (issued by a Branch in India) the net worth in respect of Indian operations shall only be taken into account. In case of Foreign Bank, the BG issued by Foreign Bank should be counter guaranteed by any Nationalised Bank in India. In case of JV, the BG shall be furnished on behalf of the JV and not individually by the members.

Enclosure-A

MAN - MONTHS INPUT FOR KEY PROFESSIONAL STAFF

AUTHORITY ENGINEER

S. No.	Key Personnel	Man-month in Construction period of 30 months	Man-month in Maintenance/Defect Liability period of 48 months
A: Key Personnel			
1.	Team Leader Cum Senior Tunnel Expert*	30	12*
2.	Geotechnical Expert	15	3
3.	Tunnel Design Engineer	18	1
4.	Tunnel Safety Expert	18	12
5.	Tunnel ventilation Cum E&M expert	6	3
6.	Geologist	10	4
7.	Contract Specialist	15	6
8.	Instrumentation & Control (SCADA) Expert	6	2
9.	Highway Engineer	30	6
10.	Bridge/Structural Engineer	20	2
11.	Material Engineer	30	2
	Sub Total	198	53
B: Sub Professional Staff			
1.	Tunnel Engineer (1 Nos *30)	30	0
2.	Geologist (1 Nos *25)	30	0
3.	Quantity Surveyor (1 Nos *30)	30	3
4.	Highway Design Engineer	6	0
5.	Bridge Design Engineer	6	0
6.	Tunnel Safety Engineer	30	24
7.	Environmental Expert	6	4
8.	Lab Technician (1 Nos *30)	30	6
9.	CAD EXPERT	3	0
10.	Survey Engineer	10	6
	Sub Total	181	43

*12(Including 6 months Continuous input of TL after project completion during maintenance period)

Note: The qualification and experience of Sub Professional staff would not be accounted in the evaluation. However, Consultant shall have to get their CVs approved from Employer before mobilization. The other inputs like support staff shall also be provided by the Consultant of an acceptable type commensuration with the roles and responsibilities of each position.

QUALIFICATION OF KEY PERSONNEL**TEAM LEADER CUM SENIOR TUNNEL ENGINEER**

Duties: The Team Leader will reside at project site throughout the period of construction supervision services. He will be overall in-charge of the project supervision of the construction package. He shall act as representative of the consulting firm appointed by the Authority. His duties will involve overall superintendence over the Resident Engineers and other experts of the construction package. He will guide, monitor, supervise and control all the activities related to supervision for the construction package. He will interact with the Project Director/ General Manager and the other officials of the Authority.

He should have the following qualification / experience

(1) Essential Qualifications.

- (a) Graduate in Civil/Mining Engineering or equivalent from a recognized university.
- (b) Total professional experience 25 years
- (c) Professional Experience of 15 years in handling major tunnelling projects
- (d) He should be involved in at least 5 years in construction/construction supervision of major tunnel projects in developed countries
- (e) At least 5 years' experience as Team Leader/Resident Engineer/Project Manager or similar capacity in transportation tunnel projects of length equal to or more than 0.7 km
- (f) He should have handled as Team Leader/Resident Engineer/Project Manager or similar capacity of at least two projects in Construction Supervision of transportation tunnels equal to more than 0.7 Km length
- (g) Not more than 65 years of age.

(2) Preferential Qualifications.

- (a) Post Graduate in civil/mining engineering or chartered engineer in civil/Mining Engineering or equivalent.
- (b) Supervision experience of transportation Tunnel projects constructed through NATM methodology

Note: (1) Similar Capacity includes the following positions

- i) On behalf of Consultant : Team Leader / Resident Engineer/Professional Engineer/Chartered Engineer (Construction Supervision/IE/AE).
- ii) On behalf of Contractor : Project Manager/ Professional Engineer/Chartered Engineer (Construction/ Construction Supervision)
- iii) In Government Organizations : Superintending Engineer (or equivalent) and above

(2) Only those projects will be considered for evaluation at Sl no 1(d), 1(e) and 1(f) where the input of the personnel is at least of one year.

TUNNEL DESIGN ENGINEER

Duties: The Tunnel Design Engineer shall be responsible for checking the designs of tunnel/design review and other incidental works to be constructed in the Project using sophisticated computer software. He shall be responsible for Detailed Design Calculation and drawing for tunnels. He shall be responsible for comprehensive assessment of structural condition of all the tunnel assets. His expertise shall include computer aided design methods for Tunnel Engineering with particular reference to Tunnel design

He should have the following qualification / experience.

(1) Essential Qualifications.

- (a) Graduate in Civil Engineering/Mining Engineering from a recognized University.
- (b) Professional Experience of 20 years out of which 12 years should be in transportation tunnel design as design expert
- (c) Experience of 5 years in design of major transportation tunnel projects in developed countries
- (d) Experience in similar capacity in construction/construction supervision of 2 transportation tunnel projects of length atleast equal to 0.7 Km each
- (e) Experience in similar capacity in design of 3 transportation tunnel projects of length atleast equal to 0.7 Km each
- (f) Experience in design of transportation tunnel using NATM technology
- (g) Not more than 65 years of age.

(2) Preferential Qualifications.

- (a) Post Graduate in Engineering in structural engineering/Mining Engineering
- (b) Innovative transport tunnel design like immersed tunnel and/ or sub-sea board tunnel

GEO-TECHNICAL EXPERT

Duties: He will be responsible for supervising all the tests to be done in different stages of construction, besides ensuring that specified tests are done as per codal stipulations and as per the specifications laid down in the contract for all the different stages of construction. The Senior Geotechnical Engineer shall be responsible for checking and verifying the Specifications for Geotechnical investigations and the geotechnical details submitted by the Contractor. He shall assist the Team Leader & Tunnel Design Engineer in design of tunnel. He shall monitor the tunnel excavation activities including blasting.

He should have the following qualification / experience.

(1) Essential Qualifications.

- (a) Graduate in Civil Engineering/Mining Engineering/ Engineering Geology or equivalent from a recognized University.
- (b) Professional Experience of 20 years
- (c) Experience of 5 years in Construction / Construction Supervision of transportation tunnel projects in developed countries
- (d) Experience as Geotechnical Engineer in Construction/Construction Supervision of at least 4 transportation Tunnel projects of length equal to or more than 0.7 Km

- (e) Specific experience in construction of tunnel projects involving vertical shaft sinking of at least 200 meter of vertical depth
- (f) Experience in similar capacity in project preparation of at least 2 transportation tunnel projects each of minimum 0.7 Km in length
- (g) Not more than 65years of age.

2) Preferential Qualifications.

- (a) Post Graduate in Rock Mechanics/ Foundation Engineering/ Tunnel Engineering/ Mining Engineering/ Geotechnical Engineering/Fracture Mechanics.

* In case the key personnel is graduate in geology and fulfils the post graduation criteria as above, then he/she will be awarded full marks.

TUNNEL SAFETY EXPERT

Duties: The Tunnel Safety Expert shall be responsible for checking and verifying the Safety Plan prepared by the Contractor. He will also ensure effective implementation of the Safety Plan, undertake safety audits during Construction, Operation and Maintenance of the Tunnel.

(1) Essential Qualifications.

- (a) Graduate in Civil/Mining Engineering from recognized university or Post Graduate in Geology/ Geotechnical Engineering.
- (b) Total Professional Experience of 20 years
- (c) Experience of 5 years in transportation tunnel safety management in developed countries
- (d) At least 10 years' experience in transportation tunnel safety works
- (e) Experience in similar capacity of tunnel safety audits during construction stage of at least 2 transportation tunnel projects each of which should be minimum 0.7 km in length
- (f) Not more than 65years of age.

(2) Preferential Qualifications.

- (a) Any professional Certification from a recognized/statutory body in safety/health/shot firer/ Explosives.

GEOLOGIST

The Senior Geologist shall be responsible for checking and verifying the geological details submitted by the Contractor. He shall assist Team Leader & Tunnel Design Engineer in design of Tunnel. He shall monitor the tunnel excavation activities including blasting. The candidate should have exposure of working in Any region and good understanding of rock and soil mechanics. He should have experience of tunnel works with appropriate design software.

The candidate should be a Post Graduate in Geology preferably with exposure in Any region. He should have a minimum 20 years of professional experience of geological works, out of which 5years should be in similar capacity for tunnelling design/ construction projects in the Any region.

(1) Essential Qualifications.

- (a) Graduation in Geology/Applied Geology from recognized university
- (b) Total Professional Experience of 20years
- (c) At least 7years experience in similar capacity in construction/construction supervision of transportation

tunnel projects

- (d) Experience of 5 years of construction/construction supervision of major transportation tunnel projects in the Any region using NATM technology
- (e) He should have handled at least 2 highway tunnel projects of construction/construction supervision in similar capacity of 0.7 Km length each
- (f) Not more than 65 years of age

(2) Preferential Qualifications.

- (a) Masters in Geology/Applied Geology from recognized university.
- (b) He should have handled at least 2 major transportation tunnel projects in similar capacity in project preparation/DPR.

CONTRACT SPECIALIST

Duties: He will be deployed for obtaining his expert opinion on emerging contractual issues. His key responsibilities will be to guide and assist Team Leader/Employer in all aspects of contract management in proper implementation of contract provisions including controlling the project cost of the construction package. He will also be required to offer his advice on contractual complications arising during the implementation on the request of the employer. He will be required to prepare manuals/schedules for the consultants team/employer based on the provisions of the contract document. He will be responsible for giving appropriate suggestions in handling claims of the contractors and any dispute arising thereof.

(1) Essential Qualifications.

- (a) Graduate in Civil Engineering from a recognized University.
- (b) Professional Experience of 20 years in Contract Management.
- (c) Experience of at least 10 years as Contract Specialist on Highway or major road projects.
- (d) Experience in similar capacity of Contract Management of 4 large Highway or major road contracts of over Rs.500 crores including experience of handling Variation orders, claims of the contractor.
- (e) Experience of handling Arbitration cases/Dispute Resolution/Adjudication in similar capacity for major roads or Highway projects.
- (e) Not more than 65 years of age.

(2) Preferential Qualifications.

- (a) Masters/Post graduate in Law/contract management/Dispute resolution

TUNNEL VENTILATION CUM E&M EXPERT

Duties: The Tunnel Ventilation Cum E&M Expert shall be responsible for checking and verifying the adequacy of design of Ventilation system during construction and O&M Period. He shall be responsible for checking and verifying the Specifications for Ventilation equipments. He will also monitor the installation, testing and operation and maintenance of the Ventilation equipments and system as a whole

(1) Essential Qualifications.

- (a) Graduate in Electrical/Mechanical Engineer from a recognized university.
- (b) Total Professional Experience of 15 years
- (c) At least 7 years experience in similar capacity in construction/construction supervision of transportation tunnel projects

- (d) He should have handled in similar capacity in construction/ construction supervision of at least 3 transportation tunnel projects each of minimum 0.7 Km in length
- (e) He should have handled in similar capacity in design/DPR at least 3 transportation tunnelling projects each of minimum 0.7 Km in length
- (f) Not more than 65 years of age.

(2) Preferential Qualifications.

- (a) Post graduate in Electrical/Mechanical

HIGHWAY ENGINEER

Duties: He shall be the in-charge of the construction supervision of project stretch and shall coordinate with all other experts of the construction projects and shall report to the Team Leader and officers of PIU as per the delegation established. He shall be directly responsible for regulating the construction process i.e. various activities like earthwork, Sub-base/base courses, bituminous pavement, bridge/culvert works proposed for being carried out under Stipulated specifications/manuals etc. For this purpose, he shall be assisted by other support engineers/personnel. He shall deal directly with the Highway Engineer and other support staff attached to ensure that the construction process is well controlled as per established specification controls to avoid later quality control stage problems. In respect of other experts like Material Engineer, Quantity Surveyor, etc., he shall be coordinating and regulating their activities to ensure smooth functioning of the Construction Package concerned. He should have adequate experience in large quantity of earthwork. He will be required to be fielded throughout the Currency of the project. The candidate is expected to be thoroughly familiar with various standards/specifications, contract procedures, design and quality control etc. In addition he will be responsible for ensuring road safety during construction and maintenance period of the project,

He should have the following qualification / experience.

(1) Essential Qualifications.

- (a) Graduate in Civil Engineering from a recognized University.
- (b) Minimum Professional Experience of 12 years in Highway Projects.
- (c) At least 5 years' experience as Senior Highway Engineer/Resident Engineer/ Project Director/Project Manager/Superintending Engineer or equivalent/Executive Engineer or equivalent on similar construction work/Independent Engineering project (*similar configuration and above*).
- (d) Should have handled at least 2 Highway projects of length 3.6 km or more of similar configuration and above as Senior Highway Engineer/Resident Engineer or similar capacity in Construction Supervision / IE.
- (e) Not more than 65 years of age.

(2) Preferential Qualifications.

- (a) Post Graduate Degree in Transportation/Highway Engineering/Structural Engineering/Geotechnical Engineering.
- (b) Experience of Construction Supervision on Highway Project on EPC mode (*of length 3.6 km or more of similar configuration and above*).

Note:

- (i) Only those projects will be considered for evaluation at S. No. 1(d), 2(b) above where at least

12 months input has been claimed.

(ii) The permanent staff would be considered those already employed with the firm prior to one year from the month during which this Tender Notice is issued.

BRIDGE & STRUCTURAL ENGINEER

Duties: His duties will involve understanding the design provisions of both bridges/ROBs/flyovers and culverts, guiding and checking of reinforcement/cable laying operations, rectifying any apparent mistakes in respect of them, checking and controlling the proper mix designs, Checking the adequacy of proper form-work, laying/compacting of concrete including curing operations. For this purpose, he will work in close coordination with the Material Engineer and the Contractor's Expert to effectively Control the quality of execution. He will be responsible for minor modifications in design of bridges/culverts, whenever required during execution.

He should have the following qualification / experience.

(1) Essential Qualifications.

- (a) Graduate in Civil Engineering from a recognized University.
- (b) Minimum Professional Experience of 12 years in handling highway/bridge projects.
- (c) Minimum 5 years' experience as Bridge/Structural Engineer or equivalent in Construction/ Supervision of Bridges/ROB/Flyover/ any other structures (of similar configuration and above)
- (d) *Experience in as Bridge/Structural Engineer or equivalent in at least one project of design or construction supervision of innovative and specialized major bridges (Pre-cast Segmental, Cantilever Construction, Cable Stayed Bridge, Suspension bridges etc.).*
- (e) *Experience in as Bridge/Structural Engineer or equivalent in at least two projects of design/supervision of Major Highway bridges/ ROB/Flyover/ any other structures of length more than 100m (viaduct length).*
- (g) Not more than 65 years of age.

2) Preferential Qualifications.

- (a) Post Graduate Degree in Structural Engineering.

Note: (i) Only those projects will be considered for evaluation at S. No. 1(d), 1(e) above where at least 12 months input has been claimed.

(ii) The permanent staff would be considered those already employed with the firm prior to one year from the month during which this Tender Notice is issued.

MATERIAL ENGINEER

Duties: He will be responsible for supervising all the tests to be done in different stages of construction, besides ensuring that specified tests are done as per codal stipulations and as per the specifications laid down in the contract for all the different stages of construction. He will be coordinating and controlling the support personnel placed with him and will report to the Resident Engineer

and to the Team Leader/Employer's representative as and when required.

He should have the following qualification / experience.

(1) Essential Qualifications.

- (a) Graduate in Civil Engineering from a recognized University.
- (b) Minimum Professional Experience of 12 years in construction of Highways / Roads / Airfield Runways
- (c) Experience of 5 years in similar capacity in Construction / Construction Supervision of Highway projects of similar configuration or more.
- (d) Experience as Material/ Geotechnical Engineer in Construction/ Construction Supervision of at least 2 Highway projects (of length 3.6 km or more of similar configuration and above).
- (e) Must be familiar with material property of road construction material, technical specifications and procedures of material tests and testing equipment.
- (f) Not more than 65 years of age.

(2) Preferential Qualifications.

- (a) Post Graduate Degree in Geo-Technical Engineering/Soil Mechanics /Foundation Engineering.

Note: (i) Only those projects will be considered for evaluation at S. No. 1(d), above where at least 12 months input has been claimed.

(ii) The permanent staff would be considered those already employed with the firm prior to one year from the month during which this Tender Notice is issued.

(A) Qualification of Key Personnel (INSTRUMENTATION AND CONTROL (SCADA) EXPERT) to be added in Enclosure B of Section 6, Terms of Reference:

Duties: He will be reporting to the Team Leader and give input as and when required during the work. He should have comprehensive knowledge of application of current technologies, standards and best practices relating to SCADA system in infrastructure projects. He should have experience in CCTV, AID dynamic, LAN and WAN. The Instrumentation and Control (SCADA) Expert shall be responsible for checking and verifying the adequacy of design, installation and maintenance of SCADA related applications and databases of the tunnel during construction as well as during operation and maintenance. He shall ensure the application of modern standard technologies and best practices relating to Tunnel SCADA system.

He should have the following qualification / experience.

(1) Essential Qualifications.

- (a) Graduate in IT/ Comp Sc./ Electrical/ Electronics/Civil/ Instrumentation/ Mechanical from a recognized university.
- (b) Total Professional Experience of 15 years
- (c) He should have minimum of 10 years experience in system requirement, installation and commissioning of all the subsystems and equipment required for remote operation and control devices similar to SCADA in any infrastructure project
- (d) He should have handled at least 2 surveillance and security systems projects

- (e) Atleast 7years experience in hardware configuration, system tuning, application development, documentation including operation and maintenance
 - (f) Not more than 65years of age.
- (2) Preferential Qualifications.
- (a) Post Graduate Degree in engineering

SUB PROFESSIONAL (To be evaluated for their suitability by Employer's Representative, before deployment)

A. Quantity Surveyor

Duties: He will be reporting to the Resident Engineer in day to day working. He will also work under the guidance of the Sr. Quantity Surveyor, and shall abide by the directions/procedures/formats of reporting and approvals settled by the Sr. Quantity Surveyor. He will act as a contract specialist also for the construction package, even though the thrust of his responsibilities will be in the areas of quantity surveying/processing of the invoices etc. He will be responsible for reporting all measures required to control the project cost and time over-runs. He will examine the claims of the contractor, variation orders, if any, and will prepare the progress reports as per the project requirements. For the purpose, he will be required to get the levels and quantity measurements checked in all items of works executed in different stages for calculations required for payment purpose. He will be required throughout the currency of the project.

Qualification and experience: The candidate should be a graduate in Civil Engineering with relevant experience in the field of estimating, preparation and processing of the invoices, analysing rates, checking survey details etc. of the projects. He should have about 8 years of relevant professional experience involving resource planning and scheduling, quantity survey, cost control, contract management etc. Diploma holders with longer relevant experience of about 12 years could also be considered. He must have worked as Quantity Surveyors for at least 4 years in any National/State Highway Projects. He should not be more than 60 years of age.

B. Tunnel Engineer:

The Tunnel Engineer shall be responsible for checking and verifying construction methodology. He shall be monitoring the construction activities.

The candidate should be a graduate Civil/Mining Engineer from a recognized university. He should have 10 years of total professional experience and should have worked for at least 5 years as Tunnel Engineer for tunnel construction projects. He should have handled at least 2 major tunnelling projects in similar capacity. He should not be more than 60 years of age.

C. Geologist:

The Geologist shall be responsible for checking and verifying the geological details submitted by the Contractor. He shall assist the Senior Geologist during the construction of the tunnel. He shall monitor the tunnel excavation activities including blasting. The candidate should have degree in Geology/applied Engineering geology preferably with exposure in Any region. He should have a minimum 10 years of professional experience of geological works, out of which 5 years should be in similar capacity for tunnelling design/ construction projects. He should have

handled at least 2 major tunneling projects in similar capacity. The candidate should have good understanding of rock and soil mechanics and have experience with appropriate design software. He should be not more than 60 years of age.

D. Tunnel Safety Engineer:

The Safety Engineer shall assist the Tunnel Safety Expert in checking and verifying the Safety Plan prepared by the Contractor. He will also ensure effective implementation of the Safety Plan, assist the Tunnel Safety Expert in undertaking safety audits during Construction, Operation and Maintenance of the Tunnel. He/She should be Graduate in Civil Engineering from recognized university and a Total Professional Experience of 15 years. He/She should have at least 5 years' experience in transportation tunnel safety works and Experience in similar capacity of tunnel safety audits during construction stage of at least 1 transportation tunnel projects each of which should be minimum 2.5 km in length. He/She should not more than 60 years of age. Any professional Certification from a recognized/statutory body in safety/health/shot firer/Explosives shall be preferred.

E. Environmental Expert:

He will be responsible effective implementation of the EMP during Construction, Operation and Maintenance of the Tunnel. The Candidate should be post Graduate in Civil Engineering/Environmental Engineering or other relevant qualification with experience of working in the Any region for at least 2 projects. He should have at least 15 years experience out of which 3 years in highway projects. He should have good knowledge of MOEF guidelines/requirements for mitigation measures. He should be not more than 60 years of age.

F. BRIDGE DESIGN SPECIALIST

The Bridge Design Specialist shall be responsible for checking the designs of bridges, ROBs, interchanges and any other structure to be constructed in the Project highway. He shall also review the rehabilitation measures to be proposed by the Concessionaire for existing structures based on site condition and structural requirement basis. His expertise shall include computer aided design methods for Civil/Structural Engineering with particular reference to Structural design. He should have the following qualification/experience.

- (a) Graduate in Civil Engineering from a recognised University and Post Graduate Degree in Structural Engineering/CAD.
- (b) Minimum Professional Experience of 15 years in Bridge/Highway Projects.
- (c) 10 years' experience in similar capacity for design of major highway Bridges /ROB/Flyover/ any other structures (of similar configuration and above).
- (d) Experience of designing of at least 4 major highway bridges/ROB/Flyover/ any other highway structures in similar capacity (of similar configuration and above).
- (e) Not more than 60 years of age.

G. Lab Technicians:

They should be at least Diploma-holders with about 5 to 6 years of experience in handling the quality control tests laboratories for road/bridge works or Graduates in Science with about 1 to 2 years of relevant experience in the field of testing of road/bridge projects.

H. HIGHWAY DESIGN SPECIALIST

The Highway Specialist shall be responsible for the review of highway designs and drawings using sophisticated computer software and also construction and O&M works. Should be a graduate in Civil Engineering from a recognized University (higher qualifications will be preferable); His expertise shall include computer aided design methods for Civil/Highway Engineering with particular reference to CAD application to the geometric design for highway rehabilitation and/or upgrading projects. He should have the following qualification/experience.

- (a) Graduate in Civil Engineering from a recognized University.
- (b) Minimum Professional Experience of 12 years in highway works.
- (c) Experience of at least 5 years in Highway Designing works as Highway Design /pavement Specialist or equivalent of Highway projects (of similar configuration and above)
- (d) He should have handled as Highway/ pavement Design Engineer or equivalent at least 2 Supervision Highway Projects of similar configuration (of length 25 km or more of similar configuration (2/4/6 laning*) and above).
- (e) He should have handled as Highway/ pavement Design Engineer or equivalent at least 2 DPR Projects of similar configuration (of length 25 km or more of similar configuration and above).
- (f) Exposure of Computer Software Programmes for Design of Highways
- (g) Not more than 60 years of age.

I. SURVEY ENGINEER

Duties: Checking layout of centreline, layout of curves, levels and profiles, etc. will be his main responsibility. Apart from this, he shall also assist the Quantity Surveyor in preparation of invoices. He shall also be responsible for modifying survey data in case any modification is required in the design during execution.

Qualifications and Experience: He should be a graduate civil engineer with 3 years for BE Civil & 6 years for Diploma holder. Survey Engineer should be conversant with modern survey equipment, total stations, auto level, digital level etc. Diploma holder should have worked in at least one major highway project. He should not be more than 60 years of age.

J. Cad Expert:

He should be Graduate in Civil Engineering/Computer Science having experience in computer related design method for highway engineering. The incumbent should have 3 years experience and should have handled at least 1 road project.

SECTION 7: DRAFT FORM OF CONTRACT

Note: This draft Agreement is a generic document and shall be modified based on particulars of the Project.

CONTRACT FOR CONSULTANT'S SERVICES

Between

(Name of Client)

And

(Name of Consultant)

Dated:

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III SPECIAL CONDITIONS OF CONTRACT

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V ANNEXURES.....

1. FORM OF CONTRACT

COMPLEX TIME BASED ASSIGNMENTS

This CONTRACT (hereinafter called the "Contract") is made the ____ day of the _____
Month of _____, 200 ____, between, on the one hand _____ (hereinafter
Called the "Client) and, on the other hand, _____ (hereinafter called the
"Consultants").

[Note : If the Consultants consist of more than one entity, the above should be partially amended to read as follows:*

"...(hereinafter called the "Client") and, on the other hand, a joint venture consisting of the following entities, each of which will be jointly severally liable to the Client for all the Consultants' obligations under this Contract, namely, _____ and _____ (hereinafter called "Consultants")]

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 :	Medical Certificate
Appendix E :	Hours of Work for Key Personnel
Appendix F :	Duties of the Client
Appendix G :	Cost Estimates
Appendix H :	Form of Performance Bank Guarantee
Appendix I :	Form of Bank Guarantee for Advance Payments
Appendix J :	Letter of invitation
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Appendix-M :	Memorandum of Understanding (in case of JV)

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)

[Note: If the Consultants consist of more than one entity, all of these entities should appear as signatures, e.g. in the following manner]

FOR AND ON BEHALF OF EACH OF
THE MEMBERS OF THE CONSULTANTS

[Name of the Member]

By
(Authorized Representative)

[Name of the Member]

By
(Authorized Representative)

etc.

GENERAL CONDITIONS OF CONTRACT**1. General Provisions**

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 1 of such 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 Government of Client's Country;
- (g) 'Local currency' means the Indian Rupees;
- (h) "Consultant" wherever mentioned in this Contract Agreement means the "Authority Engineer (AE)" and includes sub-consultants or Associates engaged by the primary consultant.
- (i) "Member", in case the Consultants consist of a joint venture of more than one entity, means any of these entities, and "Members" means all of these entities;
- (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; "Foreign Personnel" means such persons who at the time of being so hired had their domicile outside the Government's Country, "Local Personnel" means such persons who at the time of being so hired had their domicile inside the Government's Country; and 'key personnel' means the personnel referred to in Clause GC 4.2 (a).
- (l) "SC" means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;

- (m) "Services" means the work to be performed by the Consultants pursuant to his contract, as described in Appendix A hereto. The scope of work will be strictly as given in various Clauses in TOR. The approach and methodology to be adopted by the Consultant for carrying out the assignment as Authority Engineer may be modified depending on the site requirements and work programme of the EPC Contractor after mutual discussions with Employer, the EPC Contractor and the Authority Engineer. The work plan as indicated by the Consultant may be modified accordingly to the site requirements.
- (n) "Sub-consultant 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.

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 Government's Country or elsewhere, as the Client may approve.

1.8 Authority of Member in Charge

In case the Consultants consist of a joint venture of more than one entity, the Members hereby authorize the entity specified in the SC to act on their behalf in exercising all the Consultants' rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.

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. Goods and Service Tax as applicable shall be paid to the consultant while making payment for services rendered. The consultants shall then deposit the same with the tax authorities and provide a proof of having done so within next 90 days in line with policy circulars issued by Employer.

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 at the end of such time period after the Effective Date as shall be specified in the SC.

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.

2.5 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, has been obtained. Pursuant to Clause GC 7.2 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

- (a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a 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 conclusion 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 of 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 reasonably 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 agreeing on 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 Members 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 Borrower, 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 Borrower of the benefits of free and open competition.
- (h) if EPC Contractor represents to Employer that the Consultant is not discharging his duties in a fair, efficient and diligent manner and if the dispute remains unresolved, Employer may terminate this contract.

2.9.2 By the Consultants

The Consultants may, by not less than thirty (30) 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 forty-five

- (45) 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 forty-five (45) 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, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

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 and 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 Client, 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. The Client shall advise the Consultants in writing of relevant local customs and the Consultants shall, after such notifications, respect such customs.

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 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 the Client (Employer) 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 work 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 (or the Sub-consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverages, 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 ("Consultants' Sub-consultants' 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 Equipment and Materials Furnished by the Client

Equipment and materials made available to the Consultants by the Client, or purchased by the Consultants with funds provided by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Client an inventory of such equipment and materials and shall dispose of- such equipment and materials in accordance with the Client's instructions. While in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Client in writing, shall insure them at the expense of the Client in an amount equal to their full replacement value.

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 thirty (30) 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 **except as specified in Appendix E** 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 **Appendix C**. Any taking of leave by 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 90% of the remuneration which would have been payable to the Key Personnel replaced. However, for the reason other than death/extreme medical ground, (i) for total replacement upto 33% of key personnel, remuneration shall be reduced by 20% (ii) for total replacement upto between 33% to 50%, remuneration shall be reduced by 25% and (iii) for total replacement upto between 50% to 66%, remuneration shall be reduced by 30% (iv) For total replacements beyond 66% of the key personnel the client may initiate action of higher penalty/termination/debarment upto 2 years as considered appropriate. Further, after completion of the project, one replacement of key personnels shall be allowed without any reduction in the remuneration.
- For the avoidance of doubt, Key personnel replaced during negotiation i.e. accepted before agreement is not included in counting of replacements under this clause.
- (d) After the completion of scheduled construction period (30 months) one time replacement of any key personnel without reduction in remuneration is permitted subject to fulfilling qualification criteria for replacement as per contract.
- (e) In order to prevent the tendency of the personnel and consulting firm to submit incorrect and inflated CV, they should sign every page of CV before submission in order to authenticate that CV furnished by them is correct. The consulting firm and the personnel through consulting firm should be informed by Employer while accepting CV of the new personnel that if CV is found incorrect and inflated at a later date, the personnel accepted would be removed from his assignment and debarred from further Employer's works for an appropriate period to be decided by Employer and the new proposed personnel in place of removed personnel would be paid 15% less salary than the original personnel. 15% reduction in the salary will be imposed as a 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 Employer to black-list that firm.

4.6 Resident Project Manager

If required by the SC, the Consultants shall ensure that at all times during the Consultants' performance of the Services in the Government's country a resident project manager, acceptable to the Client, shall take charge of the performance of such Services.

5. **Obligations of the Client**

5.1 **Assistance and Exemptions**

Unless otherwise specified in the SC, the Client shall use its best efforts to ensure that the Government shall:

- (a) provide the Consultants, Sub-consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultants, Sub-consultants or Personnel to perform the Services;
- (b) assist for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in Government's country;
- (c) facilitate prompt clearance through customs of any property required for the Services and of the personal effects of the Personnel and their - eligible dependents;
- (d) issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services;
- (e) assist the Consultants and the Personnel and any Sub-consultants and or Associates employed by the Consultants for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law;
- (f) grant to the Consultants, any Sub-consultants and or Associates and the Personnel of either of them the privilege, pursuant to the Applicable Law, of bringing into Government's country reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Personnel and their dependents and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services: and
- (g) Provide to the Consultants, Sub-consultants and or Associates and Personnel any such other assistance as may be specified in the SC.

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 be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Clause GC 6.1(b).

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 6.1(c) hereinafter.

5.5 **Payment**

In consideration of the Services performed by the Consultants under this Contract, the Client shall make to the Consultants such payments and in such manner as is provided by Clause GC 6 of this Contract.

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 E. 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 G.
- (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 specified in the SC. The Consultants shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of these ceilings.
- (c)** Notwithstanding Clause GC 6.1(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 Remuneration and Reimbursable Expenditures

- (a)** Subject to the ceilings specified in Clause GC 6.1 (b) hereof, the Client shall pay to the Consultants (i) remuneration as set forth in Clause GC 6.2(b), and (ii) reimbursable expenditures as set forth in Clause GC 6.2(c). If specified in the SC, said remuneration shall be subject to price adjustment as specified in the SC.
- (b)** Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Clause GC 2.3 and Clause SC 2.3 (or such other date as the Parties shall agree in writing) (including time for necessary travel via the most direct route) at the rates referred to, and subject to such additional provisions as are set forth, in the SC.
- (c)** Reimbursable expenditures actually and reasonably incurred by the Consultants in the performance of the Services, as specified in Clause SC 6.3(b).

6.3 Currency of Payment

All payments shall be made in Indian Rupees and shall be subjected to applicable Indian laws withholding taxes if any.

6.4 Mode of Billing and Payment

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

- (a) The Client shall cause to be paid to the Consultants an interest bearing advance payment as specified in the SC, and as otherwise set forth below. The advance payment will be due after provision by the Consultants to the Client of a bank guarantee by a bank acceptable to the Client in an amount (or amounts) and in a currency (or currencies) specified in the SC, such bank guarantee (I) to remain effective until the advance payment has been fully set off as provided in the SC, and (ii) to be in the form set forth in Appendix I hereto or in such other form as the Client shall have approved in writing.
- (b) As soon as practicable and not later than fifteen (15 days) after the end of each calendar month during the period of the Services, the Consultants shall submit to the Client, in duplicate, itemized statements, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to Clauses GC 6.3 and 6.4 for such month. Each monthly statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable expenditures.
- (c) The Client shall cause the payment of the Consultants periodically as given in schedule of payment above within thirty (60) days after the receipt by the Client of bills with supporting documents. Only such portion of a monthly 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 ninety (90) calendar days after receipt of the final report and final statement by the Client unless the Client, within such ninety (90)-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 corrections, the foregoing process shall be repeated. Any amount which the 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. Fairness and Good Faith

7.1 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.

7.2 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 dispute subject to arbitration in accordance with Clause GC 8 hereof.

8. Settlement of Disputes

8.1 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.

8.2 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. Fake CV

If any case of fake/incorrect/inflated CV is found, it shall be dealt with very severely and would result in all possible penal action including blacklisting from future projects

of MoRTH / NHAI. This would also apply even when the consulting firm is not successful in getting the assignment. *In case CV of a person is turned out to be fake/incorrect/inflated during the assignment, the consultancy firms will have to refund the salary and perks drawn including interest @12% per annum in respect of the person apart from other consequences.* In addition to above, 10% of the salary and perks to be refunded shall be recovered from the Firm as penalty.

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: Address of Employer

Attention:

Telex : _____

Facsimile : _____

Consultant: Address of Consultant

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.

1.8 The Member in Charge is: Member (P) Sh.

(Note: If the Consultants consist of a joint venture of more than one entity, the name of the entity whose address is specified in SC 1.6.1 should be inserted here. If the Consultants consist of one entity, this Clause 1.8 should be deleted from the SC)

- 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:

i) Approval of the Contract by the client

- 2.2 The time period shall be four months or such other time period as the parties may agree in writing.

- 2.3 The time period shall be one month or such other time period as the Parties may agree in writing.

- 2.4 The time period shall be 78 months (30 month for construction period and 48 months for Maintenance period)

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
- ii) Consultant will maintain 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) If the Consultant enters into an agreement with Employer in a joint venture or 'in association', the policy must be procured and provided to Employer by the joint venture/in association entity and not by the individual partners of the joint venture/association.
 - vi) The contract may include a provision whereby the Consultant does not cancel the policy midterm without the consent of the Employer. 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 five years. PLI shall be uniformly taken for a period of 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 "Authority's Engineer", 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.
- 4.6 "The person designated as Team Leader cum Sr. Highway Engineer in Appendix C shall serve in that capacity, as specified in Clause GC 4.6."
- 6.1(b) The amount payable Indian Rupee is : _____
- 6.2(a) "Payments for remuneration made in accordance with Clause GC 6:2(a) in shall be adjusted as follows :
- (i) Consultants shall be paid billing rates for services rendered by the personnel of all categories namely (i) key Personnel; (ii) sub- Professional personnel and (iii) Support staff on man-moth wise. For calculating billing rates of remaining items of the financial proposal, namely (i) transportation, (ii) Duty travel to site (iii) Office Rent, (iv) office supplies communication etc (v) reports & document printing and (vi) survey equipment etc. quoted amount of selected consultant will be converted to percentage of civil work cost quoted by civil contractor and payment will be made in proportionate to the financial progress of the civil work. Beginning 13th months from the last date of submission of bid, billing rates shall be increased to cover all items of the contract i.e. remuneration, vehicle hire, office rent, consumables, furniture etc @ 5% every 12 months. However, for evaluation and award of the Bid proposals, the quoted initial rate (as applicable for first 12 months from last date of submission of bid) shall be multiplied by the total time input for each position on this contract, i.e. without considering the increase in the billing rates. All payments shall be made in Indian Rupees and shall be subjected to applicable Indian laws withholding taxes if any.
 - (ii) Remuneration paid pursuant to the rates set forth in Appendix G shall be adjusted every twelve (12) months (and, the first time, with effect for the billing rates earned in the 13th calendar month after the last date of submission of bid) by 5% every 12month for personnel.

Notwithstanding any other provisions in the agreement in this regard, this provision will prevail and over ride any other provision to the contrary in this agreement.

- 6.2(b)(i) (1) It is understood (i) that the remuneration rates shall cover (A) such salaries and allowances as the Consultants shall have agreed to pay to the Personnel as well as factors for social charges and overhead, and (B) the cost of

backstopping by home office staff not included in the Personnel listed in Appendix C, and (C) the Consultants' fee; (ii) that bonuses or other means of profit-sharing shall not be allowed as an element of overhead, and (iii) that any rates specified for persons not yet appointed shall be provisional and shall be subject to revision, with the written approval of the Client, once the applicable salaries and allowances are known.

- (2) Remuneration for periods of less than one month shall be calculated on an hourly basis for actual time spent in the Consultants' home office and directly attributable to the Services (one hour being equivalent to 1/240th of a month) and on a calendar-day basis for time spent away from home office (one day being equivalent to 1/30th of a month).

6.2(b)(ii) The rates for foreign and local Personnel are set forth in Appendix G

6.4(a) The following provisions shall apply to the interest bearing advance payment and the advance payment guarantee :

- 1) An advance payment. of 10% of the contract price in proportion to the quoted Indian currency (INR) in the bid shall be made within 60 days after receipt and verification of advance payment bank guarantee. The advance payment along with interest will be set off by the Client in equal instalments against the statements for the first 12 months of the Service until the advance payment has been fully set off. The advance payment shall be in Indian Rupee.
- 2) The bank guarantee shall be in the amount and in the currency of the the advance payment.
- 3) Interest rate shall be 10% per annum (on outstanding amount).

6.4 (c) The interest rate is 10 % per annum .

6.4(e) The accounts are:

.....

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

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

8.2.1 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 8.2.1 (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.

8.2.2 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.

8.2.3 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.

8.2.4 Qualifications of Arbitrators

The sole arbitrator or the third arbitrator appointed pursuant to paragraphs (a) through (c) of Clause 8.2.1 hereof shall be an internationally/nationally recognized legal or technical expert with extensive experience in relation to the matter in dispute.

8.2.5 Miscellaneous

In any arbitration proceeding hereunder:

- (a) Proceedings shall, unless otherwise agreed by the parties, be held in Delhi.
- (b) The English language shall be the official language for all purposes; and
- (c) The decision of 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.
- (d) Fee structure shall be as indicated below:

S. No.	Particulars of fee and other charges	Schedule Amount payable per Arbitrator / per case
1.	Arbitrator fee	Rs.25,000/- per day Or Rs. 7 lacs (lump sum) subject to publishing the Award within 6 months. Or Rs. 5 lakhs (Lump-sum) subject to publishing the Award after 6 months but before 12 months. Note:- The amount of fees already paid for the days of hearing @ Rs. 25,000/- would be adjusted in the lump-sum payment.
2.	Reading Charges	Rs. 25,000/- per Arbitrator per case including counter claim.
3.	Secretarial Assistance and Incidental Charges	Rs. 20,000/-
4.	Charges for Publishing / declaration of the Award	Rs.35,000/-
5.	Other expenses (As per actual against bills subject to maximum of the prescribed ceiling given below)	
	Traveling Expenses	Economy class (By Air), First Class AC
	Lodging and Boarding	(By Train) and AC Car (By Road) (a) Rs. 15,000/- per day (in metro cities)

		(b) Rs. 7,000/- per day (in other cities) (c) Rs. 3,000/- per day, if any Arbitrator makes their own arrangements.
6.	Local Travel	Rs. 1,500/- per day
7.	Extra Charges for days other than hearing / meeting days (maximum for 2 days)	Rs. 5,000/- per day for outside Arbitrator
Note:	1. Lodging, boarding and traveling expenses shall be allowed only for those members who are residing 100 kms. away from place of meeting. 2. Delhi, Mumbai, Chennai, Kolkata, Bangalore and Hyderabad shall be considered as Metro Cities.	

IV. APPENDICES

Appendix A: Description of the Services

[Give detailed descriptions of the Services to be provided; dates for completion of various tasks, place of performance for different tasks; specific tasks to be approved by Client, etc.]

Details as per TOR

Appendix B: Reporting Requirements

[List format, frequency, contents of reports and number of copies; persons to receive them; dates of submission, etc. If no reports are to be submitted, state here "Not applicable".]

Please refer TOR

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 in India, and staff- months for each.*
- C-2 Same information as C-1 for Key local Personnel.*
- C-3 Same as C-1 for Key foreign Personnel to be assigned to work outside India.*
- C-4 List of approved Sub-consultants [if already available]; same information with respect to their Personnel as in C-1 through C-4)*

Please refer TOR

Appendix D: Medical Certificate

[Show here an acceptable form of medical certificate for foreign Personnel to be stationed in India. If there is no need for a medical certificate, state here: "Not applicable. "]

The form of Medical Certificate as required under the rules of Govt. of India

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 (Mondays through Saturday) every week and observe the Gazetted Holidays of Government of India as Holidays. The Consultant shall work as per the work program of the EPC Contractor. In this context in case 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 Contractor's activities on the site. No extra remuneration shall be claimed or paid for extra hours of work required in the interest of Project completion.

In respect of foreign personnel, one day per trip as travel time from and to the country of the Government shall be allowed.

Appendix F:**Duties of the Client**

[List here under:

- F-1 Services, facilities and property to be made available to the Consultants by the Client.
- F-2 Counterpart personnel to be made available to the Consultants by the Client.]

Please refer TOR

Appendix G:
Cost Estimates

List hereunder cost estimate in INR:

1. *Monthly rates for local Personnel (Key Personnel and other Personnel)*
2. *Reimbursable/Rental/Fixed expenditures as follows:*
 - a. *Cost of local transportation.*
 - b. *Cost of other local services, rentals, utilities, etc.*

Appendix H: FORM OF PERFORMANCE SECURITY
(PERFORMAMANCE BANK GUARANTEE)

(Clause-13 of TOR)

To

Address of Employer:

WHEREAS _____

[Name and address of Consultants]¹ (hereinafter called "the consultants")
 has undertaken, in pursuance of Contract
 No. _____ dated _____
 to provides the services on terms and conditions set forth in this
 Contract _____ [Name of contract and brief description of works) (hereinafter called
 the "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Consultants
 shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein
 as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Consultants such a Bank
 Guarantee;

NOW THEREOF we hereby affirm that we are the Guarantor and responsible to
 you, on behalf of the Consultants up to a total of

_____ [amount of Guarantee]²
 _____ [in words], such sum
 being payable in the types and proportions of currencies in which the Contract Price
 is payable, and we undertake to pay you, upon your first written demand and without
 cavil or argument, any sum or sums within the limits of _[amount of Guarantee] as
 aforesaid without your needing to prove or to show grounds or reasons for your demand
 for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Consultants
 before presenting us with the demand.

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

any such change, addition or modification.

The liability of the Bank under this Guarantee shall not be affected by any change in the constitution of the consultants or of the Bank.

Notwithstanding anything contained herein before, our liability under this guarantee is restricted to Rs. _____ (Rs. _____) and the guarantee shall remain valid till _____. Unless a claim or a demand in writing is made upon us on or before _____ all our liability under this guarantee shall cease.

This guarantee shall be valid for a period of 80 months i.e. upto 2 months beyond the expiry of contract of 78 months.

Signature and Seal of the Guarantor _____ In presence of

Name and Designation _____ 1.

(Name, Signature & Occupation)

Name of the Bank _____

Address _____ 2.

(Name & Occupation)

Date _____

¹ Give names of all partners if the Consultants is a Joint Venture.

**Appendix I: Form of Bank Guarantee for Advance Payments
(Reference Clause 6.4(a) of Contract)**

(To be stamped in accordance with Stamp Act, if any, of the country of issuing bank)

Ref: _____

Bank Guarantee: _____

Date: _____

Dear Sir,

In consideration of M/s. _____ (hereinafter referred as the "Client", which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s. _____ (hereinafter referred to as the "Consultant" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a contract by issue of client's Contract Agreement No. _____ dated _____ and the same having been unequivocally accepted by the Consultant, resulting in a Contract valued at _____ for _____ Contract (hereinafter called the "Contract")

(scope of work)

and the Client having agreed to make an advance payment to the Consultant for performance of the above Contract amounting to _____ (in words and figures) as an advance against Bank Guarantee to be furnished by the Consultant.

We _____

(Name of the Bank) having its Head Office at _____ (hereinafter referred to as the Bank), which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators executors and assigns) do hereby guarantee and undertake to pay the client immediately on demand any or, all monies payable by the Consultant to the extent of _____ - as aforesaid at any time upto _____ @ _____ without any demur, reservation, contest, recourse or protest and/or without any reference to the consultant. Any such demand made by the client on the Bank shall be conclusive and binding notwithstanding any difference between the Client and the Consultant or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. we agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Client discharges this guarantee.

The Client shall have the fullest liberty without affecting in any way the liability of the Bank under

this Guarantee, from time to time to vary the advance or to extend the time for performance of the contract by the Consultant. The Client shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Client and to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the Contract between the Client and the Consultant any other course or remedy or security available to the Client. The bank shall not be relieved of its obligations under these presents by any exercise by the Client of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or

forbearance or other acts of omission or commission on the part of the Client or any other indulgence shown by the Client or by any other matter or thing whatsoever which under law would but for this provision have the effect of relieving the Bank.

The Bank also agrees that the Client at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Consultant and notwithstanding any security or other guarantee that the Client may have in relation to the Consultant's liabilities.

Notwithstanding anything contained herein above our liability under this guarantee is limited to _____ and it shall remain in force upto and including

*_____ and
shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s. _____ on whose behalf this guarantee has been given.*

Dated this _____ day of
_____ 200_____ at _____

WITNESS

_____(signature)

(Signature)

(Name)

(Name)

(Official Address)

Designation (with Bank stamp)

Attorney as per Power of

Attorney No.

Dated

Strike out, whichever is not applicable.

Note 1: The stamp papers of appropriate value shall be purchased in the name of bank who issues the "Bank Guarantee".

Note 2: The bank guarantee shall be from a Nationalized Indian Bank or reputed foreign commercial Bank acceptable to client for Foreign Consultant with counter guarantee from Nationalized Bank. Bank guarantee furnished by Foreign consultant shall be confirmed by any Nationalized Bank in India.

Appendix J

Letter of invitation

Appendix K

Letter of Award

Appendix L

Minutes of pre-bid meeting**Appendix-M****Memorandum of Understanding****between**
_____**And**

Whereas the Ministry Road Transport & Highways, through the Regional Office, Mumbai Ministry Road Transport & Highways, through the Regional Office, Mumbai/ Ministry of Road Transport & Highways (MoRT&H)/..... State PWD (the ' **Employer** ') has invited proposal for appointment of Authority's Engineer for _____ (Name of project) hereinafter called the Project.

And Whereas _____ (Lead Partner) and _____ JV partner/s have agreed to form a Joint Venture to provide the said services to the Employer as Authority's Engineer; and

Now, therefore, it is hereby agreed by and on behalf of the partners as follows:

- (i) _____ will be the lead partner and _____ will be the other JV partner/s.
- (ii) _____ (lead partner) shall be the incharge of overall administration of contract and shall be authorised representative of all JV partners for conducting all business for and on behalf of the JV during the bidding process and subsequently, represent the joint venture for and on behalf of the JV for all contractual matters for dealing with the Employer/EPC Contractor if Consultancy work is awarded to JV.
- (iii) All JV partners do hereby undertake to be jointly and severally responsible for all the obligation and liabilities relating to the consultancy work and in accordance with the Terms of Reference of the Request for Proposal for the Consultancy Services.
- (iv) Subsequently, if the JV is selected to provide the desired consultancy services, a detailed MOU indicating the specific project inputs and role of each partner/s along with percentage sharing of cost of services shall be submitted to the Employer (Consultant may submit the detailed MOU along with percentage sharing of cost at the time of bidding also).

For _____ (Name of Lead partner)

Managing Director/Head of the Firm

Address

For _____ (Name of JV partner/s)

Managing Director/Head of the Firm

Address

For _____ (Name of Associate Partner/s)

DISCLAIMER

The Applicant must read all the instructions in the RFP and submit the same accordingly.

Appendix-N**BANK GUARANTEE FORMAT FOR BID SECURITY**

(To be stamped in accordance with Stamp Act if any, of the country of issuing bank)

Ref.: Tender No. _____, dated _____

Bank Guarantee:

Date:

WHEREAS, _____ (Name of Bidder) (hereinafter called "the bidder") has submitted his bid dated _____ (date) for the Tender No. _____, dated _____ (hereinafter called "the Bid").

KNOW ALL MEN by these presents that We, _____ [Name of Bank] of _____ [Name of Country] having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ [Name of Employer] (hereinafter called "the Employer") in the sum of Rs. _____ (Rupees _____ Lakhs Only) for which payment will and truly to be made to the said Employer the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 2011.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws his Bid during the period of bid validity specified in the Bid document; or
2. If the Bidder does not accept the correction of arithmetical errors of his Bid Price in accordance with the Instructions to Bidder; or
3. If the Bidder having been notified of the acceptance of his Bid by the Employer during the period of bid validity,
 - a. fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - b. fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders,

we undertake to pay the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date 180 (one hundred and eighty) days after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

Notwithstanding anything contained herein before, our liability under this guarantee is restricted to Rs. _____ (Rs. _____) and the guarantee shall remain valid till _____. Unless a claim or a demand in writing is made upon us on or before _____ all our liability under this guarantee shall cease.

DATE _____

SIGNATURE OF THE BANK _____

SEAL OF THE BANK _____

SIGNATURE OF THE WITNESS _____

Name and Address of the Witness _____

The bank guarantee shall be issued by a bank (Nationalized/Scheduled) located in India

Note : The BG issuing bank bidder is requested to send bank guarantee confirmation through SFMS gateway directly to following bank account of Employer (Ministry of Road Transport and Highways)-

Bank Account No -	50003100000092
Name of Bank Account-	PAO(NH)MUMBAI
Account Type -	GOVT. ACCOUNT
Bank & Branch Name-	SYNDICATE BANK, FORT BRANCH, MUMBAI
IFSC, CODE-	SYNB0005000
MICR CODE-	400025014

This guarantee shall also be operable at our Mumbai office, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment there under claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation. The liability of bank under this Guarantee shall not be affected by any change in the constitution of the consultant or of the Bank.

Appendix-EC**DETAILED EVALUATION CRITERIA**

1. **First Stage Evaluation -Proof of Eligibility (Para 5.1 of Data Sheet)**
2. **Second Stage Evaluation -Technical Evaluation (Para 5.1 of Data Sheet)**

2.1 Firm's Relevant Experience

Following is the break-up:

S. No.	Description	Maximum marks
I	Year of establishment of the firm (in case of JV, year of establishment of lead member shall be considered).	2
(i)	Up to 5 years: 1.5 marks	
(ii)	More than 5 years: 2 marks	
II	Average Annual Turnover (last three years) from consultancy business	2
(i)	< Rs 10.05 crore: 0 marks	
(ii)	Rs 10.05crore: 1.5	
(iii)	Add for additional turnover 0.25 (zero point two five) mark for every Rs 5.025 crore above Rs 10.05 crore subject to maximum 0.5 marks.	
III	Experience in construction supervision/Independent Engineer/Authority's Engineer of a *4/6 lane highway tunnel project during the last 12 years of minimum length equal to or more than 0.7 km in a single stretch	16
(i)	< 0.7 km or more tunnel project= 0	
(ii)	≥0.7 Km to 0.95 Km = 12	
(iii)	≥0.95 to 1.2 Km = 13	
(iv)	>1.45 and equal to 1.7 Km = 14	
(v)	>1.7 km and above = 16	
IV	Experience in DPR preparation/Design/Feasibility Study of *4/6 lane highway tunnel projects of length equal to or more than 0.7 Km in a single stretch in last 12 years.	5
(i)	1 project: 4 marks	
(ii)	Add 0.5 (zero point two five) marks extra for each additional project subject to maximum 1 mark.	
Total		25

Note 1: In case of JV the turnover and experience details of Lead and JV partners will be added for evaluation. Credentials of associate firm, except key personnel.

Note 2: Employer's certificate should be submitted substantiating the experience claimed by the firm

Note 3: * 4/6 lane Tunnel Works for road will be considered as applicable for the project for which the RFP is invited. For standalone Tunnel projects, experience in Tunnel work (either standalone project or as a part of road/rail project) only be considered. The experience of 2 lane road tunnel

projects/tunnel projects of metro or road will be considered for 4/6 laning tunnel projects with a multiplication factor of 0.4.

Note: (i) Weightage to be given when experience by a Firm as Sole Firm/Lead Partner in a JV/ Other Partner in a JV/As Associate

Sl No.	Status of the firm in carrying out DPR/ Feasibility Study	Weightage for experience
1	Sole firm	100 %
2	Lead partner in a JV	60%
3	Other partner in a JV	40 %
4	As Associate	25%

2.2 Qualification and Competence of the Key Staff for adequacy of the Assignment. (Para 12.2 of Data Sheet and Enclosure II of TOR)

2.2.1 Team Leader cum Senior Tunnel Expert:

Sl. No.	Description	Maximum Points
I	General Qualification	25
(i)	Graduate in Civil/Mining Engineering or equivalent	20
(ii)	Post-Graduate or chartered engineer in civil/Mining Engineering or equivalent	5
II	Adequacy for the Project	70
a i)	Total Professional Experience <25 years - 0 marks 25 years - 5 marks Add 1 mark extra for each additional year of experience subject to maximum 2 (two) marks.	7
a ii)	Total professional experience in handling major tunnelling projects <15 years – 0 marks 15 years – 6 marks Add 1 mark extra for each additional year of experience subject to maximum 2 (two) marks.	8
a iii)	Experience in major tunnel construction/construction supervision projects (Road/Rail/Metro) in Developed countries <5 years – 0 marks 5 years - 7 marks Add 1.5 marks extra for each additional year of experience subject to maximum 3 marks.	10
b	Experience in Similar Capacity	
b i)	Experience as Team Leader or similar capacity in construction supervision of major tunnel projects (Road/Rail/Metro) of length equal to or more than 0.7 Km <5 years - 0 marks 5 years - 7 marks Add 1.5 marks extra for each additional year of experience subject to maximum 3 marks.	10

b ii)	Experience as Team Leader or similar capacity of project Preparation/ Design of tunnel projects(Road/Rail/Metro) of length 0.7 Km or more 1 Project - 8 marks Add 1 mark extra for each additional projects subject to maximum 2 marks.	10
b iii)	Experience as Team Leader or similar capacity in construction supervision of tunnels (Road/Rail/Metro) of length 0.7 km or more < 2 projects - 0 marks 2 Projects - 15 marks Add 1.25 mark extra for each additional projects subject to maximum 5(five) marks.	20
c)	Experience in construction supervision of major tunnel projects (Road/Rail/Metro) using NATM 1 project - 4 marks 2 or more projects - 5 marks	5
III	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total :	100
	Note: (1) Similar Capacity includes the following positions i) On behalf of Consultant : Team Leader / Resident Engineer/Professional Engineer/Chartered Engineer (Construction Supervision/IE/AE). ii) On behalf of Contractor : Project Manager/ Professional Engineer/Chartered Engineer (Construction/ Construction Supervision) iii) In Government Organizations : Superintending Engineer (or equivalent) and above ** tunnel projects, unless specifically mentioned, to be considered for evaluation has to be major tunnels of length equal to or more than 0.5 Km	

2.2.2 TUNNEL DESIGN ENGINEER:		
Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduate in Civil Engineering/Mining Engineering	20
	ii) Post-Graduate in Engineering (Structural)/ Mining Engineering	5
II	Adequacy for the Project	70
a. i)	Total Professional Experience <20 years - 0 20 years - 11 marks Add 1 mark extra for each additional year of experience subject to maximum 4 (four) marks.	15
a. ii)	Experience of design/ project preparation/ preliminary study involving major Tunnel (Road/Rail/Metro) projects in developed countries <5 years - 0 5 years- 7 marks Add 1 mark extra for each additional year of experience subject to maximum 3 (three) marks.	10
	Similar Capacity	
b. i)	Experience in tunnel design (Road/Rail/Metro) works in similar capacity <12 years - 0 12 years - 7 marks Add 1 mark extra for each additional year of experience subject to maximum 3 (three) marks.	10
b. ii)	Experience in similar capacity in Project Preparation/DPR involving design of tunnels (Road/Rail/Metro) of more than 0.7 km length (Min. 1 year experience in a project) < 3 projects - 0 3 projects - 11 marks Add 1 mark extra for each additional projects subject to maximum 4 (four) marks.	15
b. iii)	Experience in similar capacity in construction/construction supervision projects involving design/design review of tunnels of more than 0.7 km length (Min. 1 year experience in project) <2 projects - 0 2 projects - 7 marks Add 1.5 mark extra for each additional projects subject to maximum 3(three) marks.	10
c. i)	Experience in innovation tunnel design (Road/Rail/Metro) like immersed tunnel and sub-sea bored tunnel 1 projects - 4 marks 2 or more projects -5 marks	5
c. ii)	Experience in design tunnel projects(Road/Rail/Metro) using NATM 1 project - 4 marks 2 or more projects - 5 marks	5
III	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5

	Total :	100
	** tunnel projects, unless specifically mentioned, has to be major tunnels of length equal to or more than 0.5 Km to be considered for evaluation	

2.2.3 TUNNEL SAFETY EXPERT:

Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduate in Civil/Mining Engineering or Post Graduate in Geology/Geotechnical Engineering	20
	ii) Any professional Certification from a recognized/statutory body on safety/health/shot firer	5
II	Adequacy for the Project	70
a. i)	Total Professional Experience <20 years - 0 20 years - 11 marks Add 1 mark extra for each additional year of experience subject to maximum 4 (four) marks.	15
a. ii)	Experience Tunnel (Road/Rail/Metro) Safety Works <10 years - 0 10 years - 11 marks Add 1 mark extra for each additional year of experience subject to maximum 4 (four) marks.	15
a. iii)	International exposure in tunnel safety works in developed countries <5 years - 0 5 years - 7 marks Add 1 mark extra for each additional projects subject to maximum 3 (three) marks.	10
	Similar Capacity	
b. i)	Experience in similar capacity of Tunnel Safety Audits during construction stage of tunnel projects(Road/Rail/Metro) of minimum length of 0.7 km < 2 projects - 0 2 projects - 15 marks Add 1.25 mark extra for each additional projects subject to maximum 5 (five) marks.	20
b. ii)	Experience in similar capacity of Tunnel Safety Audits in design stage on tunnel projects (Road/Rail/Metro) 1 project - 8 marks 2 or more - 10 marks	10
III	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total :	100
	** tunnel projects, unless specifically mentioned, has to be major tunnels of length equal to or more than 0.5 Km to be considered for evaluation	

2.2.4 Geotechnical Expert:

Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduate in Civil Engineering/Mining Engineering/ Engineering Geology or equivalent from a recognized University.	20
	ii) Post Graduate in Rock Mechanics/ Foundation Engineering/ Tunnel Engineering/ Mining Engineering/ Geotechnical Engineering/Fracture Mechanics. * In case the key personnel is graduate in geology and fulfils the post graduation criteria as above, then he/she will be awarded full marks	5
II	Adequacy for the Project	70
a. i)	Total Professional Experience <20 years - 0 20 years - 11 marks Add 1 mark extra for each additional year of experience subject to maximum 4 (four) marks.	15
a. ii)	Experience in Construction/ Construction Supervision of major tunnel projects(Road/Rail/Metro) in developed countries < 5 years - 0 5 years - 7 marks Add 1 mark extra for each additional year of experience subject to maximum 3 (three) marks.	10
	Experience in similar capacity	
b. i)	Experience as Geotechnical engineer or similar capacity in construction/ construction supervision of at least 4 tunnel projects(Road/Rail/Metro) of length equal to or more than 0.7 km < 4 projects - 0 4 projects - 17 marks Add 2 mark extra for each additional project subject to maximum 8 (eight) marks.	25
b. ii)	Experience as Geotechnical engineer or similar capacity in Construction/ Construction Supervision of major tunnel projects involving vertical shaft sinking of at least 200m vertical depth 1 project - 4 marks 2 or more projects - 5 marks	5
b. iii)	Experience as Geotechnical engineer or similar capacity in design/project preparation of tunnel projects(Road/Rail/Metro) of at least 0.7 km length < 2 projects - 0 2 projects - 11 marks Add 2 marks extra for each additional projects subject to maximum 4 (four) marks.	15
III	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total :	100

	** tunnel projects, unless specifically mentioned, has to be major tunnels of length equal to or more than 0.5 Km to be considered for evaluation	
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2.2.5 GEOLOGIST:

Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduation in Geology /Applied Geology from recognized university	20
	ii) Masters in Geology /Applied Geology from recognized university	5
II	Adequacy for the Project	70
a. i)	Total Professional Experience <20 years - 0 20 years - 15 marks Add 1 mark extra for each additional year of experience subject to maximum 5 (five) marks.	20
a. ii)	Experience in major Tunnel construction/construction supervision Projects (Road/Rail/Metro) in Any Region using NATM technology < 5 years - 0 5 years - 12 marks Add 1.5 marks extra for each additional year subject to maximum 3 (three) marks.	15
	Similar Capacity	
b. i)	Experience in major Tunnel(Road/Rail/Metro) Construction works in similar capacity < 7 years - 0 7 years - 12 marks Add 1 mark extra for each additional year of experience subject to maximum 3 (three) marks.	15
b. ii)	Experience in similar capacity in project preparation/DPR involving of major tunnel projects(Road/Rail/Metro). (Min 1 year experience in a project) <2 projects - 0 2 projects -7 marks Add 1.5 marks extra for each additional projects subject to maximum 3 (three) marks.	10

b. iii)	Experience in similar capacity in highway/ Rail/ Metro tunnel construction/construction supervision with minimum length of 0.7 km < 2 projects - 0 2 project - 7 marks Add 1.5 marks extra for each additional projects subject to maximum 3 (three) marks.	10
III	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total :	100
	** tunnel projects, unless specifically mentioned, has to be major tunnels of length equal to or more than 0.5 Km to be considered for evaluation	

2.2.6 Instrumentation & Control (SCADA) Expert:

Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduate in IT/ Comp Sc./ Electrical/ Electronics/Civil/ Instrumentation/ Mechanical	20
	ii) Post-graduate in Engineering	5
II	Adequacy for the Project	70
i)	Total Professional Experience <15 years - 0 15 years - 12 marks Add 1 mark extra for each additional year of experience subject to maximum 3 (three) marks.	15
ii)	Experience in system requirement, installation and commissioning of all the subsystems and equipment required for remote operation and control devices similar to SCADA in any infrastructure project. < 10 years - 0 10 years - 15 marks Add 2.5 marks extra for each additional year of experience subject to maximum 10 marks	25

Sl. No.	Description	Max. Points
iii)	Experience in at least 7 years experience in hardware configuration, system tuning, application development, documentation including operation and maintenance < 7 years - 0 7 years - 10 Add 1.25 marks extra for each additional year of experience subject to maximum of 5 marks	15
iv)	Experience in handling at least 2 surveillance and security systems projects 2 project - 10 marks Add 2.5 marks extra for each additional project subject to maximum 5 (Five) marks.	15
III	Employment with the Firm < 1year - 0 >1 year to 2 years - 2 marks >2 years to 3 years - 3 marks > 3 years - 5 marks	5
	Total :	100

2.2.7 TUNNEL VENTILATION CUM E&M EXPERT:		
Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduate in Electrical/Mechanical Engineering	20
	ii) Post-Graduate in Electrical/Mechanical Engineering	5
II	Adequacy for the Project	70
a. i)	Total Professional Experience <15 years - 0 15 years - 15 marks Add 1.25 mark extra for each additional year of experience subject to maximum 5 (five) marks.	20
	Similar Capacity	
b. i)	Experience as Tunnel Ventilation Expert or similar capacity in Construction Supervision/IC of major tunnel works(Road/Rail/Metro) < 7 years - 0 7 years - 10 marks Add 2.5 marks extra for each additional year of experience subject to maximum 10 (ten) marks.	20
b. ii)	Experience as Tunnel Ventilation Expert or similar capacity in construction supervision of tunnel (rail/road/metro) projects of minimum length of 0.7 km (Min 1 year experience in project) <3 projects - 0 3 projects - 10 Add 2.5 marks extra for each additional projects subject to maximum 5 (five) marks.	15
b. iii)	Experience as Tunnel Ventilation Expert or similar capacity in design/DPR of tunnel (rail/road/metro) projects of minimum length of 0.7 km (Min 1 year experience in project) <3 projects - 0 3 projects - 10 Add 2.5 marks extra for each additional projects subject to maximum 5 (five) marks.	15
3	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total :	100
	** tunnel projects, unless specifically mentioned, has to be major tunnels of length equal to or more than 0.5 Km to be considered for evaluation	

2.2.8 Contract Specialist:

Sl. No.	Description	Max. Points
I	General Qualification	25
	i) Graduate in Civil Engineering	20
	ii) Post-Graduate in Law/ Dispute Resolution/Contract Management	5
II	Adequacy for the Project	70
a. i)	Total Professional Experience in Contract Management <20 years - 0 20 years - 15 marks Add 1 mark extra for each additional year of experience subject to maximum 5 (five) marks.	20
	Similar Capacity	
b. i)	Experience as Contract Expert or similar capacity in major roads/ highway projects < 10 years - 0 10 years - 10 marks Add 1 mark extra for each additional year of experience subject to maximum 5 (five) marks.	15
c. i)	Experience of contract management of major roads/ highway projects over Rs 500 crore including experience of handling variation orders, claims of the contractor < 4 projects - 0 4 projects - 12 Add 1 mark extra for each additional project subject to maximum 3 (three) marks.	15
c. ii)	Experience of Handling Arbitration cases/Dispute resolution/Adjudication in respect of any road/highway project 1 project - 10 marks Add 2.5 marks extra for each additional project subject to maximum 10 (ten) marks.	20
III	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total :	100

2.9 Highway Engineer:

Sr. No.	Description	Max. Points
1	General Qualification (Enter values in column 5 & 6)	25
	I) Graduate in Civil Engineering from recognized university	21
	II) Post Graduation in Transportation/Highway Engineering/Structural Engineering/Geotechnical Engineering	4

2	Adequacy for the Project (Enter values in column 4 & 6)	70
a)	Professional Experience :	
i)	Total Professional Experience in handling Highway projects < 12 years -0 12 years -11 Add 1 mark extra for each additional completed year of experience subject to maximum 4 (four) marks.	15
ii)	Experience as Senior Highway Engineer/Resident Engineer/Project Director/Project Manager/Superintending Engineer or equivalent/Executive Engineer or equivalent on construction works/Independent Engineer Projects (similar configuration (2/4/6 laning*) and above). < 5 years -0 5 years -18 Add 1 marks extra for each additional year of experience subject to maximum 7 (seven) marks.	25
iii)	Experience as Senior Highway Engineer/ Resident Engineer or similar capacity in Construction Supervision/ IE for similar Highway Projects (of length 3.6 km or more of similar configuration (2/4/6 laning*) and above) < 2 projects -0 2 projects -18 Add 1 marks extra for each additional project subject to maximum 7 (Seven) marks.	25
iv)	Experience in Supervision of Highway Construction on EPC mode (of length 3.6 km or more of similar configuration (2/4/6 laning*) and above). 2.5 marks for each project subject to maximum 5 (five) marks.	5
3	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total Marks -	100

Note:

- (i) Only those projects will be considered for evaluation at S. No. 2(iii), 2(iv) above where at least 12 months input has been claimed.
- (ii) The permanent staff would be considered those already employed with the firm prior to one year from the bid due date.

2.10 Bridge Structural Engineer:

Sr. No.	Description	Max. Points
1	General Qualification (Enter values in column 5 & 6)	25
	I) Graduate in Civil Engineering from recognized university	21
	II) Post Graduation in Structural Engineering	4
2	Adequacy for the Project (Enter values in column 4 & 6)	70
a)	Professional Experience :	
i)	Total Professional Experience in handling Highway/Bridge projects < 12 years -0 12 years -15 Add one mark extra for each additional 2 year subject to maximum 5(five) marks.	20
ii)	Experience as Bridge/Structural Engineer or equivalent in Construction/ Supervision of Bridges/ROB/Flyover/ any other structures (of similar configuration (2/4/6 laning*) and above) < 5 years -0 5 years -15 Add 1 (one) mark extra for each additional completed year of experience subject to maximum 5 (five) marks.	20
iii)	Experience as Bridge/Structural Engineer or equivalent in design/supervision of Major Highway bridges/ ROB/Flyover/ any other structures of length more than 100m (viaduct length). < 2 Bridges -0 2 Bridge -15 Add 1 (one) mark extra for each additional bridge subject to maximum 5 (five) marks.	20
iv)	Experience as Bridge/Structural Engineer or equivalent in design or construction supervision of innovative and specialized major bridges (Pre-cast Segmental, Cantilever Construction, Cable Stayed Bridge, Suspension bridges etc.) Experience in 1 structure - 7 Add 1 (one) mark extra for each additional bridge subject to maximum 3 (three) marks.	10
3	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5

	Total Marks -	100
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Note: (i) Only those projects will be considered for evaluation at S. No. 2(iii), 2(iv) above where at least 12 months input has been claimed.

(ii) The permanent staff would be considered those already employed with the firm prior to one year from the bid due date.

2.11 Material Engineer

Sr. No.	Description	Max. Points
1	2	3
1	General Qualification (Enter values in column 5 & 6)	25
	I) Graduate in Civil Engineering from recognized university	21
	II) Post Graduation in Geotechnical Engineering/ Foundation Engineering/Soil Mechanics	4
2	Adequacy for the Project (Enter values in column 4 & 6)	70
a)	Professional Experience :	
i)	Total Professional Experience in construction of highways/roads/airfield runways < 12 years -0 12 years -15 Add one mark extra for each additional year of experience subject to maximum 5 (five) marks.	20
ii)	Experience in similar capacity in Construction/Construction Supervision of Highway Projects (of similar configuration (2/4/6 laning*) and above) < 5 years -0 5 years -19 Add 2.0 (two) marks extra for each additional year of experience subject to maximum 6 (six) marks.	25
iii)	Experience in similar capacity in Construction/Construction Supervision of similar Highway projects (of length 3.6 km or more of similar configuration (2/4/6 laning*) and above). < 2 nos -0 2 nos -19 Add 1 marks extra for each additional project subject to maximum 6 (six) marks.	25

3	Employment with the Firm < 1 year - 0 marks > 1 year to 2 years - 3 marks > 2 years to 3 years - 4 marks > 3 years - 5 marks	5
	Total Marks -	100

Note: (i) Only those projects will be considered for evaluation at S. No. 2(iii), above where at least 12 months input has been claimed.
(ii) The permanent staff would be considered those already employed with the firm prior to one year from the bid due date.

List of Developed Countries

Ref: 1. Enclosure -B (Qualification and Experience) of Section-6 (Terms of References of RFP)

2. Appendix EC, (Detailed Evaluation Criteria)

1	United States	18	Iceland
2	Germany	19	Euro Area
3	Italy	20	Spain
4	Netherlands	21	Belgium
5	Austria	22	Greece
6	Portugal	23	Finland
7	Ireland	24	Slovak Republic
8	Slovenia	25	Luxembourg
9	Estonia	26	Cyprus
10	Malta	27	Japan
11	United Kingdom	28	Canada
12	Korea	29	Australia
13	Taiwan Province of China	30	Sweden
14	Switzerland	31	Hong Kong SAR
15	Singapore	32	Czech Republic
16	Norway	33	Israel
17	Denmark	34	New Zealand
35	All G-20 countries and India		

PROCEDURE FOR E-TENDER
INSTRUCTIONS TO APPLICANTS

(Note: RFP stands modified to the extent required as per these instructions).

DEFINITIONS

Words in capital and not defined in this document shall have the same meaning as in the Request for Proposal ("RFP").

1) ACCESSING/PURCHASING OF BID DOCUMENTS:

(i) It is mandatory for all the Bidders to have class-III Digital Signature Certificate (DSC) (in the name of Authorized Signatory / Firm or Organisation / Owner of the Firm or organisation) from any of the licensed Certifying Agency (Bidders can see the list of licensed CAs from the link www.cca.gov.in) to participate in e-tendering of MoRT&H/ NHAI.

DSC should be in the name of the authorized signatory as authorized in Appendix III of this RFP. It should be in corporate capacity (that is in Bidder capacity / in case of JV in the Lead Member capacity, as applicable). The Bidder shall submit document in support of the class III DSC. Following may kindly be noted:-

(a) Registration with e-procurement portal of MoRTH/ NHAI should be valid at least up to the date of submission of BID.

(b) BIDs can be submitted only during the validity of registration.

(ii). If the firm / Joint Venture is already registered with e-tendering service provider of MoRTH/ NHAI, and validity of registration is not expired the firm / Joint Venture is not required a fresh registration.

(iii) RFP can be viewed/downloaded, free of cost w.e.f. 11.10.2018 till 13.11.2018 up to 17:00 hours.

Following may be noted:

(a) Bids can be submitted only during the validity of registration with the <https://eprocure.gov.in> .

(b) The amendments/clarifications to the RFP, if any, will be posted on morth.eproc.in

(iv) To participate in bidding, Applicants have to pay a sum of Rs. 5,000/- (Rs. five thousand only) as a cost of the RFP (non-refundable) to **"Regional Pay and Accounts Officer (NH), Mumbai"** through a demand draft payable at Mumbai.

(v) If the Applicant has already registered with the <https://eprocure.gov.in> and validity of registration has not expired, then such Applicant does not require fresh registration.

2) PREPARATION AND SUBMISSION OF APPLICATIONS:

(i) Detailed RFP may be downloaded from <https://eprocure.gov.in> and the Bid may be submitted online following the instructions appearing on the screen. A Vendor manual

containing the detailed guidelines for e-tendering system is also available on <https://eprocure.gov.in>.

(ii) The following shall be the form of various documents in the Application:

A. **Only Electronic Form (to be uploaded on the <https://eprocure.gov.in>) [Refer to Clause 4.1 (preparation and submission of Application) of the RFP]**

- (a) Technical proposal as indicated in Para 'B' below
- (b) Financial proposal as per format prescribed in Section-5 of RFP.

B. **Original (in Envelope) [Refer to Clause 4.1 (preparation and submission of Application) of the RFP]**

(I) **Technical Proposal in Hard Bound for including:**

- (a) Power of Attorney for signing the Application
- (b) If applicable, the Power of Attorney for Lead Member of JV;
- (c) Copy of Memorandum of Understanding between JV partners, if applicable;
- (d) Copy of Memorandum of Understanding with Associate, if applicable
- (g) Firms credentials as per format prescribed in SECTION-3 OF RFP.
- (h) Technical proposal as per format as prescribed in SECTION-4 OF RFP.

(II) Demand Draft towards cost of RFP of Rs. 5,000/- (Rupees Five thousand only) in favour of Regional Pay and Accounts Officer (NH), Mumbai payable at Mumbai;

(III) Bid Security (For the amount given in section 1 of this document) in the form of a Bank Guarantee and the format specified in this document in favor of Regional Officer MoRTH, Mumbai. The BG issuing bank bidder is requested to send bank guarantee confirmation through SFMS gateway directly to following bank account of Employer (Ministry of Road Transport and Highways)-

Bank Account No -	<u>50003100000092</u>
Name of Bank Account-	<u>PAO(NH)MUMBAI</u>
Account Type -	<u>GOVT. ACCOUNT</u>
Bank & Branch Name-	<u>SYNDICATE BANK, FORT BRANCH, MUMBAI</u>
IFSC, CODE-	<u>SYNB0005000</u>
MICR CODE-	<u>400025014</u>

(IV) Duly executed on plain paper 'Integrity Pact' as per enclosed format.

(iii) The Applicant shall submit the original documents specified above in point No.2 (ii)B together with their respective enclosures and seal it in an envelope and mark the

envelope as “Technical Proposal” for the Project for which proposal is submitted and name and address of the Applicant. The envelope must be clearly marked “**DO NOT OPEN, EXCEPT IN THE PRESENCE OF THE EVALUATION COMMITTEE**”. In addition, the Application due date should be indicated on the right hand corner of the envelope. The original documents should be submitted before 17:00 hours Indian Standard Time on **14.11.2018**, at any of the below mentioned address in the manner and form as detailed in the RFP. A receipt thereof should be obtained from the below mentioned person.

Shri Anshumali Srivastava Regional Officer (Maharashtra & Goa) Regional Office, Mumbai Ministry of Road Transport & Highways Room 508 & 509 5th Floor, Konkan Bhawan CBD Belapur Navi Mumbai	Shri V.S.Deshpande Chief Engineer (NH) Public Works Department 5th Floor Konkan Bhawan CBD Belapur Navi Mumbai	Shri P.S.Mandpe Joint Managing Director-III MSRDC Bandra Worli Sea Link Office Reclamation, Bandra Mumbai
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- (iv) The Applicant shall upload scanned copies of the documents as specified in point nos. 2 (ii) (A) & (B) above on the <https://eprocure.gov.in> before **17:00 hours** Indian Standard Time on the Application due date i.e **13.11.2018**. No hard copy of the documents as specified in point nos. 2 (ii) (A) above is required to be submitted. In the event of any discrepancy between the original and the copy (in electronic form), the original shall prevail.
- (v) It may be noted that the scanned copies can be prepared in file format i.e. PDF and/or ZIP only. The Applicants can upload a single file of size of 10 MB only but can upload multiple files.

3. Modification/Substitution/Withdrawal of bids:

- (i) The Bidder may modify, substitute or withdraw its e- bid after submission. Prior to the Bid Due Date. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date.
- (ii) Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.
- (iii) For modification of e-bid, bidder has to detach its old bid from e-tendering portal and upload/resubmit digitally signed modified bid.
- (iv) For withdrawal of bid, bidder has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.
- (v) Before withdrawal of a bid, it may specifically be noted that after withdrawal of a bid for any reason, bidder cannot re-submit e-bid again.

4. OPENING AND EVALUATION OF APPLICATIONS:

- (i) Opening of Proposals will be done through online for Financial Proposal and both on-line and manually for Technical Proposal.
- (ii) For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the bid shall be considered non-responsive.

The Authority shall open Envelope containing Technical Proposal received as mentioned in point nos. **2 (ii) B** at **11:00 hours Indian Standard Time on the 15.11.2018** in the presence of the Applicants who choose to attend. This Authority will subsequently open the Technical Proposal as mentioned in point No. **2 (ii) A(a)** above and evaluate the Applications in accordance with the provisions set out in the RFP.

- (iii) The Financial Proposal **2 (ii) A (b)** will be opened of the short listed applicants who qualify for financial opening as per RFP. The date of opening of Financial Proposal will be notified later on.

DISCLAIMER

The Applicant must read all the instructions in the RFP and submit the same accordingly.