



Government of Nepal
Ministry of Physical Infrastructure & Transport
Department of Roads

Planning & Design Branch
Planning, Monitoring and Evaluation Unit

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Babarmahal,
Kathmandu

Letter No: - 071/72

**First Amendment for
Notice No. 7-PMEU/071/72
(Date of First Publication: 071/11/12; Annapurna Post Daily)**

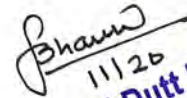
Following amendment has been made to the Information to consultants (Data sheet) **5.3 (4) Professional Key Personnel** of the RFP of the Feasibility Study of Regional and Tourism Roads of different 14 packages (PMEU/337159/071/72/F1-F14).

The **5.3 (4) Professional Key Personnel** shall be replaced by the following;

Note 5 belongs to Data sheet 5.3 (4) Required Professional Key Personnel

Note 5: One firm/jv shall repeat the proposed professional key personnel. But, in case of repetition of professional key personnel with other firm/jv, the Unit shall ask via email the person for physical presence within seven days to declare him/herself the firm/jv to whom he/she shall want to be associated.


Er. Umesh Jha
Deputy Director General
Planning & Design Branch


11/20
Laxmi Dutt Bhatta
Unit Chief (PMEU)
NEC. No. 3630 'A'

Government of Nepal
Ministry of Physical Infrastructure and Transport

Department of Roads
Design and Planning Branch
Planning Monitoring and Evaluation Unit
Babarmahal, Kathmandu

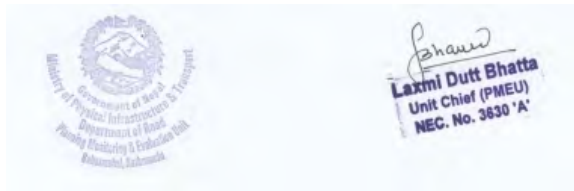
Request for Proposal

for

Consulting Services

for

Feasibility Study of Road

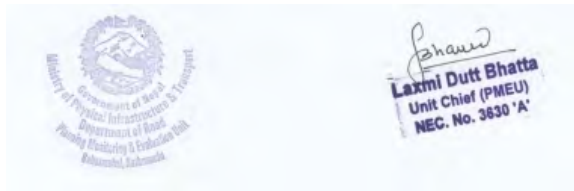


Contract No. –PMEU/337159/070/71-F1~F14

Consultant's Name and address:

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Section 1. Letter of Invitation

As per Issued



Section 2. Information to Consultants

- 1. Introduction**
- 1.1 The Client named in the Data Sheet will select a consultant among those listed in the Letter of Invitation, in accordance with the method of selection specified in the Data Sheet.
- 1.2 The consultants are invited to submit a Technical Proposal and a Financial Proposal, for services as specified in the Data Sheet. The proposal will be the basis for contract negotiations and ultimately for a signed contract with the selected consultant.
- 1.3 The consultants must familiarize themselves with local conditions and take them into account in preparing their proposals. To obtain first hand information on the assignment and on the local conditions, consultants are encouraged to visit the Client before submitting a proposal and are advised to attend a pre-proposal conference if one is specified in the Data Sheet.
- 1.4 The Client will provide the inputs specified in the Data Sheet, assist the consultant in obtaining licences and permits needed to carry out the services, and make available relevant project data and reports.
- 1.5 Please note that (i) the costs of preparing the proposal and of negotiating the contract, including a visit to the Client, are not reimbursable as a direct cost of the assignment; and (ii) the Client is not bound to accept any of the proposals submitted.
- 1.6 GoN (or Donor Agency) policy requires that consultants provide professional, objective, and impartial advice and at all times hold the Client's interests paramount, without any consideration for future work, and strictly avoid conflicts with other assignments or their own corporate interests. Consultants shall not be hired for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of not being able to carry out the assignment in the best interest of the Client.
- 1.7.1 Without limitation on the generality of this rule, consultants shall not be hired under the circumstances set forth below:
- a. A consultant, which has been engaged by the Client to provide goods or works for a project, and any of their affiliates, shall be disqualified from providing consulting services for the same project. Conversely, consultants hired to provide consulting services for the preparation or implementation of a project, and any of their affiliates, shall be disqualified from subsequently providing goods or works or services related to the initial assignment (other than a continuation of the consultant's earlier consulting services) for the same project.
- b. Consultants or any of their affiliates shall not be hired for any assignment which, by its nature, may be in conflict with another assignment of the consultants.
- 1.7.2 Any previous or ongoing participation in relation to the assignment by the consultant, its professional staff or affiliates or associates under a contract with the GoN may result in rejection of the proposal. Consultants should clarify their

situation in that respect with the Client before preparing the proposal.

1.8 It is the GoN's policy to require its implementing agencies, as well as consultants under GoN (or Donor Agency) financed contracts, to observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the GoN:

a. defines, for the purposes of this provision, the terms set forth below as follows:

i. "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; and

ii. "fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Client, and includes collusive practices 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.

b. will reject a proposal for award if it determines that the consultant recommended for award has engaged in corrupt or fraudulent activities in competing for the contract in question;

c. will cancel the consultant's contract if it at any time determines that corrupt or fraudulent practices were engaged in by representatives of the consultant or the Client during the selection process or the execution of that contract;

d. will debar a consultant for a stated period of time, to be awarded a contract if it at any time determines that the consultant has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract; and

e. will have the right to require that, a provision be included requiring consultants to permit the Client inspect their accounts and records relating to the performance of the contract and to have them audited by auditors appointed by the Client.

1.9 Consultants shall not be under a debarment for corrupt and fraudulent practices issued by GoN accordance with the above sub para. 1.8 (d).

1.10 Consultants shall be aware of the provisions on fraud and corruption stated in the Standard Contract under the clauses indicated in the Data Sheet.

2. Clarification and Amendment of RFP Documents

2.1 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, cable, telex, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by cable, telex, facsimile, or electronic mail to such requests and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit proposals.

-
- 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 an invited consultant, amend the RFP. Any amendment shall be issued in writing through addenda. Addenda shall be sent by mail, cable, telex, facsimile, or electronic mail to all invited consultants and will be binding on them. The Client may at its discretion extend the deadline for the submission of proposals.
- 3. Preparation of Proposal**
- Technical Proposal**
- 3.1 Consultants are requested to submit a proposal Sub - Clause 1.2 written in the language(s) specified in the Data Sheet.
- 3.2 In preparing the Technical Proposal (TP), consultants are expected to examine the documents constituting this RFP in detail. Material deficiencies in providing the information requested may result in rejection of a proposal.
- 3.3 While preparing the Technical Proposal, consultants must give particular attention to the following:
- i. If a consultant considers that it does not have all the expertise for the assignment, it may obtain a full range of expertise by associating with individual consultant(s) and/or other consultants or entities in a joint venture or sub-consultancy, as appropriate. Consultants may associate with the other consultants invited for this assignment only with approval of the Client as indicated in the Data Sheet. Consultants must obtain the approval of the Client to enter into a joint venture with consultants not invited for this assignment.
 - ii. For assignments on a staff-time basis, the estimated number of professional staff-months is given in the Data Sheet. The proposal shall, however, be based on the number of professional staff-months estimated by the consultant. For fixed-budget-based assignments, the available budget is given in the Data Sheet, and the Financial Proposal shall not exceed this budget.
 - iii. It is desirable that the majority of the key professional staff proposed be permanent employees of the consultant or have an extended and stable working relationship with it.
 - iv. Proposed professional staff must, at a minimum, have the experience indicated in the Data Sheet, preferably working under conditions similar to those prevailing in Nepal.
 - v. Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.
 - vi. Reports to be issued by the consultants as part of this assignment must be in the language(s) as specified in the Data Sheet.
- 3.4 The Technical Proposal shall provide the following information using the attached Standard Forms (Section 3):
- i. A brief description of the consultant's organization and an outline of recent experience on assignments (Section 3B) of a similar nature. For each assignment, the outline should indicate, *inter alia*, the client, location and duration

of the assignment, contract amount, and consultant's involvement.

- ii. Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by the Client (Section 3C).
- iii. A description of the methodology and work plan for performing the assignment (Section 3D).
- iv. The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing (Section 3E).
- v. CVs recently signed by the proposed professional staff and the authorised representative submitting the proposal (Section 3F). Key information should include number of years working for the consultant/entity and degree of responsibility held in various assignments during the last ten (10) years.
- vi. Estimates of the total staff input (professional and support staff; staff time) needed to carry out the assignment, supported by bar chart diagrams showing the time proposed for each professional staff team member (Sections 3E and 3G).
- vii. A detailed description of the proposed methodology, staffing, and monitoring of training, if the Data Sheet specifies training as a major component of the assignment.
- viii. Any additional information requested in the Data Sheet.

3.5 The Technical Proposal shall not include any financial information.

Financial Proposal

3.6 In preparing the Financial Proposal (FP), consultants are expected to take into account the requirements and conditions outlined in the RFP documents. The Financial Proposal should follow Standard Forms (Section 4). It lists all costs associated with the assignment, including (a) remuneration for staff (, in the field and at headquarters), and (b) reimbursable expenses such as subsistence (per diem, housing), transportation (mobilization and demobilization), services and equipment (vehicles, office equipment, furniture, and supplies), office rent, insurance, printing of documents, communication(Telephone, Fax etc.) surveys, and training, if it is a major component of the assignment. If appropriate, these costs should be broken down by activity.

3.7 The Financial Proposal should include all duties, taxes and other levies , and other charges imposed under the applicable law payable by the Consultant under the Contract or for any other cause.

3.8 Consultants shall express the price of their services in Nepalese Rupees.

3.9 The Data Sheet indicates the required validity period of the proposals. During this period, the consultant is expected to keep available the professional staff proposed for the assignment. The Client will make its best effort to complete negotiations within this period. If the Client wishes to extend the validity period of the proposals, the consultants who do not agree have

the right not to extend the validity of their proposals.

4. Submission, Receipt, and Opening of Proposals

- 4.1 The original proposal (TP and FP) shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the consultant itself. Any such corrections must be initialled by the persons or person who sign(s) the proposals.
- 4.2 An authorized representative of the Consultants shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal.
- 4.3 For each proposal, the consultants shall prepare the number of copies indicated in the Data Sheet. Each Technical Proposal and Financial Proposal shall be marked "**ORIGINAL**" or "**COPY**" as appropriate. If there are any discrepancies between the original and the copies of the proposal, the original governs.
- 4.4 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked "**Technical Proposal**," and the original and all copies of the Financial Proposal in a sealed envelope clearly marked "**FINANCIAL PROPOSAL**" and warning: "**DO NOT OPEN WITH THE TECHNICAL PROPOSAL.**" Both envelopes shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and other information indicated in the Data Sheet and be clearly marked, "**DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE.**"
- 4.5 The completed Technical and Financial Proposals must be delivered at the submission address on or before the time and date stated in the Data Sheet. Any proposal received after the closing time for submission of proposals shall be returned unopened.
- 4.6 After the deadline for submission of proposals, the Technical Proposal shall be opened immediately by the evaluation committee. The Financial Proposal shall remain sealed and deposited with the Client's Procurement Unit until all submitted proposals are opened publicly.

5. Proposal Evaluation

General

- 5.1 From the time the bids are opened to the time the contract is awarded, if any consultant wishes to contact the Client on any matter related to its proposal, it should do so in writing at the address indicated in the Data Sheet. Any effort by the consultant to influence the Client in the Client's proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the consultant's proposal.
- 5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation, is concluded.

Evaluation of Technical Proposals (QCBS,QBS,FBS, LCBS))

- 5.3 The evaluation committee, appointed by the Client as a whole, and each of its members individually, evaluates the proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria and point system specified in the Data Sheet. The evaluation committee shall compute the score obtained by each proposal by taking the average of the scores

given by each member to the particular proposal. Each responsive proposal will be given a technical score (St). A proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.

5.4 In the case of Quality-Based Selection, the highest ranked consultant is invited to negotiate its proposal and the contract on the basis of the Technical Proposal and the Financial Proposal submitted in accordance with the instructions given in para. 1.2 and the Data Sheet.

Public Opening and Evaluation of Financial Proposals (CBS Only)

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 and the proposed prices shall be read aloud and recorded. The Client shall prepare minutes of the public opening.

Public Opening and Evaluation of Financial Proposals (QCBS , FBS,LCBS)

5.6 After the evaluation of quality is completed, the Client shall notify those consultants whose proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify the consultants that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date shall be 7 after the notification date. The notification may be sent by registered letter, cable, telex, facsimile, or electronic mail.

5.7 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.

5.8 The evaluation committee will determine whether the Financial Proposals are complete (i.e., whether they have costed all items of the corresponding Technical Proposals; if not, the Client will cost them and add their cost to the initial price), correct any computational errors.

5.9 In case of Fixed Budget Selection (FBS), the consultant's Financial Proposals with cost more than the specified fixed budget ceiling by the Client in Data Sheet shall be rejected.

5.10 In case of Least Cost Based Selection (LCBS), the consultant's proposal which has scored the minimum pass mark in the Technical proposal and is of the least cost in the financial proposal shall be invited for negotiation.

5.11 In case of QCBS and FBS with financial proposal within specified fixed budget ceiling, the lowest Financial Proposal (Fm) will be given a financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the Data Sheet. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the Data Sheet: $S = St \times T\% + Sf \times P\%$. The consultant

achieving the highest combined technical and financial score will be invited for negotiations.

6. Negotiations

- 6.1 Negotiations will be held at the address indicated in the Data Sheet. The aim is to reach agreement on all points and sign a contract.
- 6.2 Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work plan), staffing and any suggestions made by the consultant to improve the Terms of Reference. The Client and consultant will then work out final Terms of Reference, staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the "Description of Services" and form part of the contract. Special attention will be paid to getting the most the consultant can offer within the available budget and to clearly defining the inputs required from the Client to ensure satisfactory implementation of the assignment.
- 6.3 Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff (no breakdown of fees) nor other proposed unit rates in the cases of QCBS methods. For QBS, the consultant should provide the information on remuneration rates described in the Appendix to this information.
- 6.4 Having selected the consultant on the basis of, among other things, an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the experts named in the proposal. Before contract negotiations, the Client will require assurances that the experts will be actually available. The Client will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the assignment. If substitution is considered then the proposed alternative candidate shall be evaluated as per the original criteria. The qualification and experience of the substitute candidate shall equal to or higher than the originally proposed candidate. If this is not the case and if it is established that key staff were offered in the proposal without confirming their availability, the consultant may be disqualified.
- 6.5 The negotiations will conclude with a review of the draft form of the contract. . If negotiations fail, the Client will invite the consultant whose proposal received the second highest score to negotiate a Contract.

7. Award of Contract

- 7.1 Pursuant to Sub-Clause 6.5, the consultant, with whom agreement is reached following negotiation, shall be selected for approval of his proposal and the Client shall notify it's intention to accept the proposal to the selected consultant and other short-listed consultants within 7 days of selection of the winning proposal.
- 7.2 Any consultant, who has submitted a proposal and is not satisfied with the procurement process or Client's decision provided as per Sub - Clause 7.1 and believes that the Client has committed an error or breach of duty which has or will result in loss to him then the consultant may give an application for

review of the decision to the Client with reference to the error or breach of duty committed by the Client. The review application should be given within 7 days of receipt of information regarding the issue of letter by the Client notifying it's intention to accept the winning proposal pursuant to Sub Clause 7.1.

- 7.3 If the review application is not received by the Client pursuant to Sub-Clause 7.2 then the proposal of the Consultant, selected as per Sub-Clause 7.1 shall be accepted and the successful consultant shall be notified to come for signing the Agreement within 15 days.
- 7.4 If the Consultant fails to sign an agreement pursuant to Sub-Clause 7.3 then the Client will invite the consultant whose proposal received the next highest score to negotiate a contract.
- 7.5 If a review application is received by the Client pursuant to Clause 7.1 then the Client will clarify and respond within 5 days of receiving such application
- 7.6 If the applicant is not satisfied with the decision given by the procuring entity and/ or the decision is not given by the Procuring Entity Chief within 5 days then the applicant can file a complaint to the Review committee within 7 days.
- 7.7 The Client shall return the unopened Financial Proposals of those consultants who did not pass the technical evaluation.
- 7.8 The consultant is expected to commence the assignment on the date and at the location specified in the Data Sheet.

8. Confidentiality

- 8.1 Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the consultants who submitted the proposals or to other persons not officially concerned with the process, until the letter of intention to accept the proposal is not issued to the selected consultant pursuant to Sub- Clause 7.1.

9. Conduct of Consultants

- 9.1 The Consultant shall be responsible to fulfill his obligations as per the requirement of the Contract Agreement, RFP documents and GoN's Public Procurement Act and Regulations.
- 9.2 The consultant shall not carry out or cause to carryout the following acts with an intention to influence the implementation of the procurement process or the procurement agreement :
- give or propose improper inducement directly or indirectly,
 - distortion or misrepresentation of facts
 - engaging or being involved in corrupt or fraudulent practice
 - interference in participation of other prospective bidders.
 - coercion or threatening directly or indirectly to impair or harm, any party or the property of the party involved in the procurement proceedings,
 - collusive practice among consultants before or after submission of proposals for distribution of works among consultants or fixing artificial/uncompetitive proposal price with an intention to deprive the Client the benefit of open competitive proposal price.
 - contacting the Client with an intention to influence the Client with regards to the proposals or interference of any kind in

examination and evaluation of the proposals during the period after opening of proposals up to the notification of award of contract

10. Blacklisting Consultant

10.1 Without prejudice to any other rights of the Employer under this Contract , the Public Procurement Monitoring Office may blacklist a Consultant for his conduct up to three years on the following grounds and seriousness of the act committed by the consultant:

- a) if it is proved that the bidder committed acts pursuant to the Information to Consultants clause 9.2,
- b) if the bidder fails to sign an agreement pursuant to Information to Consultants clause 7.3,
- c) if it is proved later that the bidder/contractor has committed substantial defect in implementation of the contract or has not substantially fulfilled his obligations under the contract or the completed work is not of the specified quality as per the contract
- d) if convicted by a court of law in a criminal offence which disqualifies the consultant from participating in the contract.
- e) if it is proved that the contract agreement signed by the consultant was based on false or misrepresentation of consultant's qualification information,
- f) other acts mentioned in the Data Sheet or SCC

10.2 A Consultant declared blacklisted and ineligible by the Non-Public procurement Office and or concerned Donor Agency in case of donor funded project shall be ineligible to bid for a contract during the period of time determined by the GON and or the concerned donor agency.

Information to Consultants

DATA SHEET

Clause Reference

1.1	<p>The name of the Client is:</p> <p>Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Planning and Design Branch Planning Monitoring and Evaluation Unit</p> <p>The method of selection is: Quality- and Cost-Based Selection (QCBS)</p>
1.2	<p>The name, objectives, and description of the assignment are:</p> <p>Name : Feasibility Study of Road as given in the BOQ</p> <p>Objectives: Recommendation of feasible Alignment</p> <p>Description: Identification of Three Feasible Alignment, Recommendation of Best One</p>
1.3	<p>A pre-proposal conference will be held on 7th day of letter issue at 1:00 p.m. at the PMEUE, Babarmahal, Kathmandu</p> <p>The name(s), address(es), and telephone numbers of the Client's official(s) are:</p> <p>Name: Laxmi Dutt Bhatta</p> <p>Address : Unit Chief, Government of Nepal</p> <p>Ministry of Physical Infrastructure and Transport</p> <p>Department of Roads</p> <p>Planning and Design Branch Planning Monitoring and Evaluation Unit e-mail: pmeunit@dor.gov.np</p>
1.4	<p>The Client will provide the following inputs: NA</p>
1.10	<p>The clauses on fraud and corruption in the Contract are: NA</p>
2.1	<p>Clarifications may be requested 7 days before the submission date</p> <p>The address for requesting clarifications is: Government of Nepal Ministry of Physical Infrastructure and Transport Department of Roads Planning and Design Branch Planning Monitoring and Evaluation Unit</p>
3.1	<p>Proposals should be submitted in the following language(s): English</p>

3.3	(i) Short listed consultants/entity may not associate with other short listed consultants: (ii) The estimated number of professional staff-months required for the assignment is: NA (iii) Available Budget for Fixed Budget Assignment : NA (iv) The minimum required experience of proposed professional staff is: As indicated in the TOR (vi) Reports that are part of the assignment must be written in the following language(s): English																																							
3.4	(vii) Training is a specific component of this assignment: No (viii) Additional information in the Technical Proposal includes: See TOR																																							
3.9	Proposals must remain valid for 90 days after the submission date.																																							
4.3	Consultants must submit an original and no additional copies of each proposal:																																							
4.4	The proposal submission address: Same as in 2.1 Information on the outer envelope should also include : Contract ID.																																							
4.5	Proposals must be submitted no later than: as per letter of invitation																																							
5.1	The address to send information to the Client is : Same as in 2.1																																							
5.3	The number of points to be given under each of the evaluation criteria are: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">S.N.</th> <th style="width: 60%;">Particulars</th> <th style="width: 30%;">Maximum points</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Relevant experience of the firm</td> <td>10</td> </tr> <tr> <td>2</td> <td>Methodology of Service Delivery</td> <td>36</td> </tr> <tr> <td>3</td> <td>Technology Transfer</td> <td>4</td> </tr> <tr> <td>4</td> <td>Professional Key Personnels</td> <td>50</td> </tr> </tbody> </table> <p>Total Pass marks as a whole 70% of the total maximum points</p> <p>1) Relevant experience of the firm Maximum 10 Marks</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Work Experience</th> <th style="width: 40%;">As consultant</th> </tr> </thead> <tbody> <tr> <td>Completion of work of Road Feasibility or Alignment Study or Detailed Study or Construction Supervision of Road (Road Length more than or equal to 30 KM)</td> <td>1.0 points for each job</td> </tr> </tbody> </table> <p>Understanding to the TOR, Methodology, Work Plan and Technology transfer/Training</p> <p>2) Methodology of Service Delivery Maximum 36 Marks</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Particulars</th> <th style="width: 20%;">Evaluation Remarks</th> <th style="width: 10%;">Total Marks</th> <th style="width: 20%;">Marks</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Comments or suggestions on ToR and services</td> <td>Not Significant</td> <td rowspan="3">4.0</td> <td>0.0</td> </tr> <tr> <td>General</td> <td>1.6</td> </tr> <tr> <td>Significant</td> <td>4.0</td> </tr> <tr> <td rowspan="3">Description and review any relevant documents like Design standards</td> <td>Not Significant</td> <td rowspan="3">4.0</td> <td>0.0</td> </tr> <tr> <td>General Review</td> <td>1.6</td> </tr> <tr> <td>Critical review</td> <td>4.0</td> </tr> </tbody> </table>	S.N.	Particulars	Maximum points	1	Relevant experience of the firm	10	2	Methodology of Service Delivery	36	3	Technology Transfer	4	4	Professional Key Personnels	50	Work Experience	As consultant	Completion of work of Road Feasibility or Alignment Study or Detailed Study or Construction Supervision of Road (Road Length more than or equal to 30 KM)	1.0 points for each job	Particulars	Evaluation Remarks	Total Marks	Marks	Comments or suggestions on ToR and services	Not Significant	4.0	0.0	General	1.6	Significant	4.0	Description and review any relevant documents like Design standards	Not Significant	4.0	0.0	General Review	1.6	Critical review	4.0
S.N.	Particulars	Maximum points																																						
1	Relevant experience of the firm	10																																						
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	Significant		4.0																																					
Description and review any relevant documents like Design standards	Not Significant	4.0	0.0																																					
	General Review		1.6																																					
	Critical review		4.0																																					

Detailed step by step description of the methods to be adopted for road alignment survey, hydrology, soil investigation, socio-economic survey, environmental survey and other relevant data collection from the macro structural point of view.	No Description	8.0	0.0
	General Description		2.4
	General Description with site photograph		4.8
	Technical Description with site photograph		8.0
Explanation on use of software intended to be used for the job.	Not Significant	3.0	0.0
	General		0.9
	Significant		1.8
If any of the key personnel has visited the site and has attached a photograph, described the site or if any of key personnel has worked in the nearby location during the last five years and has attached a photograph, described the site.	No Description	6.0	0.0
	General Description		1.8
	General Description with site photograph		3.6
	Technical Description with site photograph		6.0
Description of analysis steps or flowchart of the analysis process.	Not Significant	3.0	0.0
	General		0.9
	Significant		3.0
Work schedule with description	Not Significant	4.0	0.0
	Fairly justify the proposed methodology		1.6
	Relevant to proposed methodology		4.0
Manning schedule as per Work Schedule	Not Significant	4.0	0.0
	Fairly justify the proposed Work Schedule		1.6
	Relevant to proposed Work Schedule		4.0
Total Marks		36.0	

3) Technology Transfer

Maximum 4 Marks

Particulars	Evaluation Remarks	Marks	Marks
The idea of sharing know-how of the works highlights on dissemination of knowledge and training proposed by the consultant.	Not Significant	4.0	0.0
	General (only standard method description)		1.6
	Significant		4.0

4) Professional Key Personnels

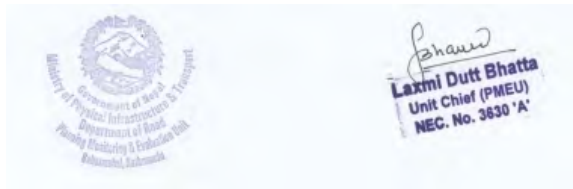
Maximum 50 Marks

Professional Key Personnel	Maximum Marks	Minimum experience after Bachelor Degree	Education required	Marks for Specific Job Experience

	Team Leader (Highway/Transport Engineer)	15	10	M.Sc. in Highway/Transportation /Civil Engineering	1.5 marks for each job
	Geotechnical Engineer/Geologist	10	7	M.Sc. in Geotechnical Engineering/Masters in Geology	1 marks for each job
	Hydrologist	10	7	M.Sc. In Water Resource /Hydrology/ Hydraulics Engineering	1 marks for each job
	Transport Economist/Sociologist	10	7	M.A. In Economics/ Sociology	1 marks for each job
	Civil Engineer	5	5	B.E. in Civil Engineering	1 marks for each job
Minimum total technical score required to qualify is 70%					
Note 1: The services for Govt of Nepal (GoN) organizations (Fully or Semi/Partially Owned) shall only be evaluated as firm/jv experiences for the Proposal. Any experience by the firm as "in association with" shall evaluate with only 25% mark of each service.					
Note 2: Any sublated Service for Govt of Nepal (GoN) organizations (Fully or Semi/Partially Owned) by a firm or JV from another private firm/jv shall not be evaluated as firm/JV experience for the Proposal.					
Note 3: Any service experience older than 10 year (counted from the last date of submission of EOI) shall not be evaluated as firm/JV experience for the Proposal					
Note 4: CV of each professional key professionals shall be submitted with signature of professional and authorized representative of the firm/jv. The Signature shall be in Blue Ink. Scan signature , or signed in ink other than Blue Ink shall cause to rejection of CV for Proposal evaluation					
Note 5: One firm/jv shall repeat proposed professional key personnel. But Incase of repetition of professional key personnel, the Unit shall ask via email the person for physical presence within seven days to declare him/herself the firm/jv to whom he/she shall want to be associated.					
Note 6: CV of personnels shall clearly mention him/her e-mail address and mobile no.					
Note 7: The firm/jv shall have to submit the NEC registration certificate for engineer professionals(except Transport Economist/Sociologist and Geologist)					
Note 8: The firm/jv shall also have to submit the any certificate as evidence of his/her education(degree) as required above.					
Note 9 :Anything not mentioned in the above paragraphs shall be as per the Public Procurement Act-2063 and Public Procurement Regulation-2064.					
5.9	The fixed Budget Ceiling for the assignment is : NA				
5.11	The formula for determining the financial scores is the following: $Sf = 100 \times Fm/F$, in which <i>Sf</i> is the financial score, <i>Fm</i> is the lowest price and <i>F</i> the price of the proposal under consideration, The weights given to the technical and Financial Proposals are: T (Technical Proposal) = 0.8 P (Financial Proposal) = 0.2				
6.1	The address for negotiations is: Same as in 2.1				
7.8	The assignment is expected to commence on or before 7 days from the date of signing of the contract				

Section 3. Technical Proposal - Standard Forms

- 3A. Technical Proposal submission form.
- 3B. Consultant's references.
- 3C. Comments and suggestions of consultants on the Terms of Reference and on data, services, and facilities to be provided by the Client.
- 3D. Description of the methodology and work plan for performing the assignment.
- 3E. Team composition and task assignments.
- 3F. Format of curriculum vitae (CV) for proposed professional staff.
- 3G. Time schedule for professional personnel.
- 3H. Activity (work) schedule.
- 3I. Transfer of Technology and Training



3A. TECHNICAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: [Name and address of Client]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for [Title of consulting services] 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.

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

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

We remain,

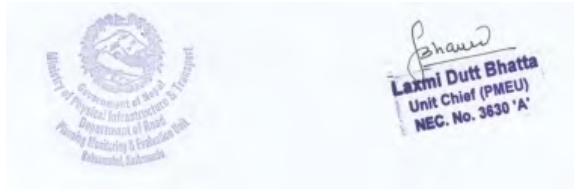
Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of Consultant:

Address:



3B. CONSULTANT'S REFERENCES

Relevant Services Carried Out in the Last Ten Years That Best Illustrate Qualifications

Using the format below, provide information on each assignment for which your Consultant/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Consultant's Name:	
Assignment name:	
Location:	
Name of Client:	
Address:	
Start Date (Month/Year):	Completion Date (Month/Year):
Approx. Value of Services [in Nepali Rupees]:	
Names of <i>Key Technical Staff</i> (Project Director/Coordinator, Team Leader) involved: 1. 2. 3. 4. etc.	
Description of Services Provided:	

Notes:

1. Please provide the documentary evidence (e.g. completion certificate) clearly showing the name of the job/service, value of service and completion date. **Any information without such evidence shall not be entertained.**
2. **Feasibility study/Alignment Study of Road , Detailed Engineering Survey and Design of Road, Pre-Feasibility/Alignment Study of Road are considered relevant** to the proposed job. Please **DO NOT** provide information on other projects which are not relevant to the proposed job.

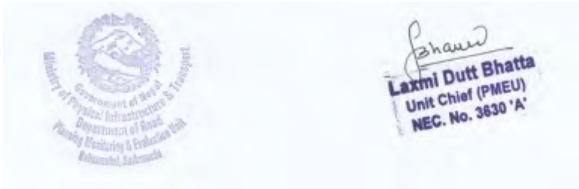
3C. COMMENTS AND SUGGESTIONS OF CONSULTANTS ON THE TERMS OF REFERENCE AND ON DATA, SERVICES, AND FACILITIES TO BE PROVIDED BY THE CLIENT

Please study the Terms of Reference thoroughly and provide your views, findings, comments and suggestions on the Terms of Reference:

- 1.
- 2.
- 3.
- 4.
- 5.

On the data, services, and facilities to be provided by the Client:

- 1.
- 2.
- 3.
- 4.
- 5.



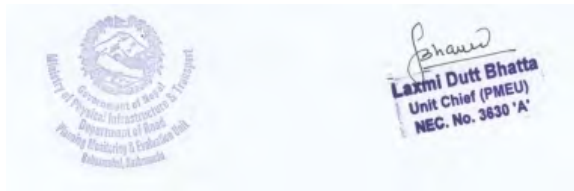
3D. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

a) Description of activities and output of tasks

b) Task Schedule

c) Schedule of Resources

d) Innovativeness



3E. TEAM COMPOSITION AND TASK ASSIGNMENTS

1. Technical/Managerial Staff

Name	Position	Task
------	----------	------

2. Support Staff

Name	Position	Task
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3F. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

Proposed Position:
Name of Consultant:
Name of Staff:
Profession:
Date of Birth:
Years with Consultant/Entity: Nationality:
Membership in Professional Societies:
Detailed Tasks Assigned:

Key Qualifications:

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

Education:

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

Employment Record:

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.]

Languages:

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

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Date:

[Signature of staff member and authorized representative of the consultant] Day/Month/Year

Full name of staff member: _____

Full name of authorized representative: _____

The Consultant shall have to submit the CV of professionals with signature and authorized representative of the consultant. The Signature must be in Blue Ink. If signature is scan and colour print, or signed in ink other than Blue Ink shall cause rejection of the Proposal.

3G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

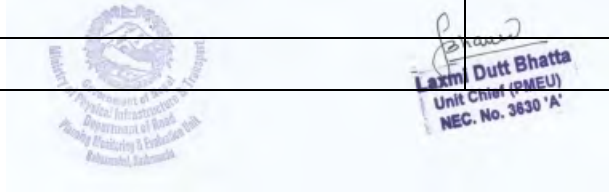
3H. ACTIVITY (WORK) SCHEDULE (SAMPLE) .

A. Field Investigation and Study Items

	<i>[1st, 2nd, etc. are months from the start of assignment.]</i>												
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
Activity (Work)													

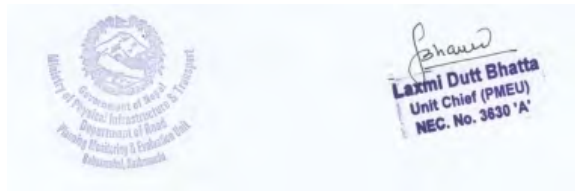
B. Completion and Submission of Reports

Reports	Date
1. Inception Report	
2. Interim Progress Report (a) First Status Report (b) Second Status Report	
3. Draft Report	
4. Final Report	



3I. TRANSFER OF TECHNOLOGY AND TRAINING

Please provide your commitment, method and plan/schedule of Transfer of Technology and Training.



Section 4. Financial Proposal - Standard Forms

- 4A. Financial Proposal submission form.
- 4B. Bill of Quantity



4A. FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: [Name and address of Client]

Ladies/Gentlemen:

We, the undersigned, offer to provide the consulting services for [Title of consulting services] in accordance with your Request for Proposal dated [Date] and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of [Amount in words and figures]. This amount is inclusive of the local taxes except Value Added Tax(VAT), which we have estimated at [Amount(s) in words and figures].

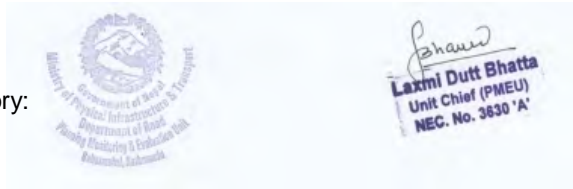
Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., [Date].

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

We remain,

Yours sincerely,

Authorized Signature:
Name and Title of Signatory:
Name of Consultant:
Address:



4B. BOQ

BILL OF QUANTITIES : SEE ATTACHED



SECTION 5: TERMS OF REFERENCE

5.1 INTRODUCTION

The feasibility study provides the basis for the approval of a project. It shall be a full technical and economic feasibility study designed to enable the concerned ministry and the NPC to appraise the project before giving approval.

To investigate the technical, economic and environmental feasibility of the road stated below for which the consultancy service is presently invited, so that decision can be made regarding the appropriateness of proceeding with engineering design:

Name of road: As per BOQ

Existing road-head to be connected to: As per BOQ

District: As per BOQ

Development Region: As per BOQ

Class of Road : Feeder Road

5.2 OBJECTIVES

The main objectives of the consultancy service are :

- To perform technical feasibility comprising technical evaluation of alternatives including level of service, development of preliminary designs and specifications, identification of materials sources and estimates of construction, operation and maintenance costs
- To perform financial feasibility comprising evaluation of project revenues and direct costs in nominal (i.e. financial) terms.
- To perform economic feasibility comprising evaluation of all project benefits and costs, and the analysis of the project's return in economic terms.
- To perform institutional sustainability comprising evaluation of the agency which will own and operate the completed infrastructure to determine institutional strengthening and training assistance which may be required to ensure the sustainability of the completed project.

5.3 SCOPE OF WORK

The main scope of work for the study shall be the investigation of feasible alternatives taking into account topography, geology, hydrology, environment, geotechnical and socio-economic factors.

The detailed scope of work to be carried out by the firm shall include but may not be limited to the following:

5.3.1 Desk Study

A desk study shall be carried out, collecting all data, maps and information relevant to feasibility study of the road. The firm shall collect maps of its study area, contour map (not smaller than 1:50,000), political & geological map, hazard map, road network map, map of earthquake zoning, land use map, aerial photo (covering the catchments area of drainage system as far as possible), socio economical data of influence area and other relevant data, report (roads network study, MRE, road standard, Standard specification, DOR publication etc.). The firm shall clearly identify the preliminary obligatory points of the possible alignments. The firm shall provide the field schedule with manning schedule. After the desk study , the firm shall submit the inception report.

5.3.2 Data Collection

The study shall require a wide variety of information in the form of mapping, field surveys, design standards and unit costs for the preliminary engineering design as well as socio-economic data for estimating benefits and impacts.

- Maximum use shall be made of secondary data from existing government and other sources and expert estimations.
- The firm shall collect related data from other agencies and all pertinent technical standards and guidelines for the type of works under study.
- The area affected by the project shall be estimated, and agreed with stakeholders as part of the data collection phase.
- Available data shall be compiled and the data gaps identified.
- The firm shall recommend a methodology how to collect the additional data needed for the feasibility study. Primary data collection requiring field surveys at the project site shall be done by sampling only.
- Formats/questionnaires/checklists for primary data collection shall be prepared.
- Primary data shall be surveyed in the field using the formats developed.
- Data collected shall be assembled in a database and maps suitable for feasibility-level analysis and costing.

Filed Survey work shall be carried out using GPS calibrated to Nepal National Grids. Height

(RL) is to be determined from topographical map.

The firm shall determine the crow fly length/theoretical length/practical length between the obligatory points, by fixing controlling points between obligatory points and finding average grade between the controlling points (not exceeding the average grade of the road) shall to be made.

During the study, firm shall also consider the road tunnels for different road sections which may be overall economy than the surface road options.

The firm shall take photograph of distinct features such as overall view, land slide area, other geologically hazardous area, river crossing, distinct soil type, road intersections, existing trails & bridges etc.

5.3.3 Stakeholder Participation

The feasibility study shall contain a process of consultation with project stakeholders. Stakeholders include the users of the project works (the public and the private sector), groups which may be directly affected by the works (property owners, residents in the project area), local bodies which may be required to operate and maintain the project works, and central government agencies whose plans and project in other sectors may affect or be affected by the project.

The firm conducting the feasibility study shall coordinate their planning with other line agencies through a coordination committee. The public shall be consulted directly through meetings with user groups, Ward Committees, NGOs and others representing local interests.

5.3.4 Data Interpretation and Analysis

The firm shall interpret and analyze the primary and secondary data collected as follows but may not be limited to the following:

Socio-economic studies of influence area with maps and sketches

- Demographic picture:
 - (a) Influenced population/economic activity of influenced population
 - (b) Structure of population
 - (c) Nature of migration and outside influx etc.
- Land use pattern:
 - (a) Wild life sanctuary

-
- (b) Forest
 - (c) Production in influenced area and surplus in influenced area
 - (d) Settlement pattern etc.
 - o Trade, Industry and Commerce (existing & planned):
 - (a) Local produces and other resources
 - (b) Export and import
 - (c) Major industries and cottage industries
 - (d) Market development
 - (e) Tourism potential etc.
 - (f) Major development works (hydro power project, irrigation project, other governmental/no-governmental development programs etc.)
 - o Health (existing & planned):
 - (a) Hospital
 - (b) Health post
 - (c) Ayurvedic clinic etc.
 - o Education (existing & planned):
 - (a) Primary schools
 - (b) Secondary schools
 - (c) High schools
 - (d) Colleges/institutions etc.
 - (e) Universities
 - o Transport and communications network (existing & planned):
 - (a) Trail network and trail bridges
 - (b) Airport, STOL strips, helipad etc.
 - (c) Water transport
 - (d) Rope-ways
 - (e) Road network
 - (f) Telecommunication, postal service & other communication networks etc.



-
- Administrative facilities:
 - (a) Government offices
 - (b) Co-operation offices
 - (c) Banks etc.
 - (d) Police station

Geo scenario studies with particular emphasis on alignments

- Geological formation shall be studied and engineering geological maps shall be proposed.
- Identify risk areas and propose of mitigation measures.
- Drainage Structure along the alignments
- Soil conservation measures & Hazard Protection measures

Traffic Studies

To determine the type and volume of future traffic for the proposed roads, the firm shall analyze all existing statistical data affecting traffic within influence area. The firm shall carry out traffic counts and origin/destination surveys or any other surveys as necessary to determine the nature of traffic and the present volume of goods, animal and pedestrian movements (motorized as well as non-motorized traffic) within the influence area. Traffic data shall be co-related to the influenced population (or economically active population) and production (surplus or deficit in agriculture/industry etc.)

Threshold traffic value for construction and upgrading of the road, for the reduction of total transport cost, judgment shall be applied considering all possible method.

In broad terms, the firm shall also identify, describe and quantify existing and probable future traffic generating sources, based on the probable future development of the influence area on relevant factors, such as;

- (a) Population growth and changes in population distribution.
- (b) Regional economic growth.
- (c) Development of agriculture, forestry, mineral and other resources.

Anticipated domestic trade in agriculture and non-agriculture commodities. A second traffic forecast shall be made assuming that an appropriate accelerated development program within the zone of influence is undertaken by the Government.

Studies on availability of construction materials and access road

- (a) Rock, Boulders for use as road aggregates for road and other structures
- (b) Sand
- (c) Gravel
- (d) Timber
- (e) Fuel
- (f) Water
- (i) Cement, Brick, Steel and other construction materials

Environmental Studies

- (a) Possible impact on Ecology, Environment and Geo-system in the vicinity of the alignment due to construction of the proposed road.
- (b) Disturbance to the geo-system and possibility for triggering the landslide and other instabilities.
- (c) Deforestation.
- (d) Grazing, farming and possible encroachments.
- (e) Any other social and environmental factors which affect the quality of life in the influence area.
- (f) Positive & negative impact on the area due to the project.
- (g) Identify and recommend mitigation methods to be incorporated in detailed design stage.

Studies on People's Participation in Road Construction

- (a) People's Participation
- (b) Labor intensive method
- (c) Capital intensive method
- (d) Appropriate technology of construction

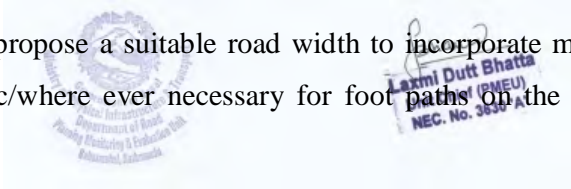
Studies on property Acquisition

The Firm shall also propose a total width of land acquisition for road reserve to accommodate the designed road width (cross-section) and the right of way.

-
- Legal Aspect of Land Acquisition
 - Temporary and Permanent Acquisition of Land and Property
 - Displacement and Rehabilitation of People
 - Compensation etc.

Additional Issues

- The site shall offer the maximum economy in costs of construction, transport of materials and later operations and maintenance.
- The site shall enable the completed facility to satisfy the intended level of service and all safety requirements.
- Every effort shall be made to utilize existing facilities in order to minimize construction cost and land acquisition.
- The site shall avoid or minimise negative impacts on social and cultural activities and the environment such as schools, hospitals, places of worship, archaeological and historical monuments, water courses and forested areas.
- The Firm shall propose a suitable road width to incorporate motorable, non-motorable, pedestrian traffic/where ever necessary for foot paths on the basis of 20 years traffic forecast.
- The Firm shall also propose the location of bus parks and taxi parks, areas to develop green belt and urban parks where ever possible along the alignment based on 20 years traffic forecast.
- The Firm shall take special care to provide a proposal for extra width to accommodate non-motorized traffic like Bullock carts (in Terai area), Rickshaw and Bicycle.
- Firm shall have to provide a provision for space to accommodate the services like Electricity, Telephone and Water Supply, Sewerage system on its right of way along with road line plantation. In addition to the above, the Firm shall have to provide provisional location for the cross drainage for the urban sewage system (if applicable).
- There is a great chance of fast urbanization due to existence of this proposed road net work, Firms are suggested to take more attention for the urban traffic type for the design of road width, pedestrian footpaths, green belts, bus/truck parks, bus lay-byes at appropriate intervals, taxi and Rickshaw stand (if required) along the proposed road alignment.



-
- The firm shall have to identify the location of major intersections into proposed road network with adequate land reserve on the basis of 20 years traffic forecast.
 - Future expansion & right of way suggestion shall be mentioned.

5.3.5 Preliminary Engineering

The preliminary engineering design shall establish the technical feasibility and initial cost estimate of viable alternatives. The following guidelines apply:

- Plans of each alternative may be expanded to show all the key components and their connections with one another.
- Typical cross-sections and details may be developed to demonstrate the technical feasibility of the project component and to enable a quick estimate of quantities.
- Key engineering calculations shall be carried out to prove technical feasibility.
- Any deviations from standards shall be identified. The implications and effects shall be discussed and agreed with stakeholders while comparing alternatives.
- The preliminary engineering design shall be in sufficient detail to permit costs to be estimated +/-25%.
- The preliminary engineering shall identify sources suitability and costs of materials for construction. As a minimum it shall include a survey of materials sources in the project vicinity.

5.3.6 Preliminary Cost Estimates

Preliminary cost estimates shall be prepared based on the following:

- The quantities of the civil works shall be computed on the basis of the schematic plan, profiles and typical sections following standard methods of measurement.
- The rate analysis for civil engineering items shall follow the norms and market prices of construction materials, labour and equipment hiring rates.
- The rate analysis for civil engineering items may be verified using the mean rates from contracts in the last 5 years as much possible.
- The costs shall be broken down into local and foreign currency components, direct cost, overheads, taxes, physical and price contingencies.

The cost components shall be :

Construction

Each alternative alignment shall be included in the cost estimate. If necessary the cost of a road system which will be necessary to connect existing population concentrations and develop the economic potential of the region, preliminary cost estimate may be based on typical construction cost of road, highway and bridge etc. recently constructed by the Department of Roads but shall take into account recent increases in the cost of construction, materials and labor prevalent in the districts. Cost estimate for stage construction shall be considered possibility starting with a low cost solution with initially a dry season road. Estimate of the local and foreign cost components, if applicable shall also be made.

Maintenance

The cost of maintenance of road for design period shall also be considered. The Firm shall have to analyze and suggest the sources of income and the possibilities in which funds for the maintenance could be mobilized viz.: from local levels, toll taxes, vehicle registration fees or fines and transport equipment and spare parts taxes or through Road Board.

Road user cost

Cost of vehicle operating cost, accident cost etc. shall be included in existing & proposed conditions. Vehicle operating cost of the proposed road shall be mentioned in terms of roughness verses required pavement cost, which is dominating cost of vehicle operation.

Comparison

Comparison shall be made between different alignments taking into consideration of construction, maintenance, road user costs and other costs into consideration. While recommending the most feasible alignment in terms of construction cost, comparison shall be made with the operating cost as well as to determine the period during which the extra construction cost will be compensated. The ranking of alternatives shall be as recommendations given in manual of mountain risk engineering (MRE).

5.3.7 Economic and Financial Analyses

The following guidelines shall be applied:

- The life of the proposed works, and the residual value at the end of the life, shall be determined.
- The economic and financial analyses shall compare the benefits and costs of the project alternatives (the “with project” case) over the project life against projected

—

conditions if no project were implemented (the “without project” case). Careful analysis is needed to define both cases.

- For economic analysis, nominal costs and benefits shall be converted to an economic basis by removing taxes and duties and applying shadow prices where appropriate.
- The construction cost, O&M cost, safety cost etc. shall be calculated over the construction and operating life of the project to generate the cost stream.
- Benefits shall be calculated over the operating life of the project to generate the benefit stream.
- Both cost and benefit streams shall be discounted and converted into present values using the discount rate specified by GoN.
- The economic indicators normally used to evaluate and compare alternatives shall be economic internal rate of return (EIRR), benefit-cost ratio (B/C), net present value (NPV) and incremental NPV.
- Where there shall be uncertainty on cost and benefit streams, sensitivity analyses shall be carried out for 25% increase in construction costs, 100% increase in maintenance cost, 20% reduction in user costs, 30% reduction in growth of benefits

5.4 FIRM'S REPORTING OBLIGATIONS

The whole work shall be completed within time frame as mentioned below:

S. No.	Particulars	Time required				
		Up to 20 KM	20 to 50 KM	50-100 KM	100-150 KM	150-200 KM
1	Desk study	1 weeks	1 weeks	1 weeks	2 weeks	3 weeks
2	Field works	1 weeks	2 weeks	3 weeks	4 weeks	6 weeks
3	Draft report preparation	2 weeks	3 weeks	4 weeks	5 weeks	6 weeks
4	Final report submission	1 weeks	1 week	2 weeks	2 weeks	2 weeks
	Total time from the date of signing the	5 weeks	7 weeks	10 weeks	13 weeks	17 weeks

Drawings: longitudinal profile of all alternatives, suggested typical cross-section of the road, topographical map (scale not less than 1:50,000) with distinct contours (traced if required) along the study area with district demarcation, geological map.

The feasible alignment shall be tracked in Google Earth, and the firm have to submit *.kmz file of the alignment to the Unit.

The firm shall submit the following reports in English.

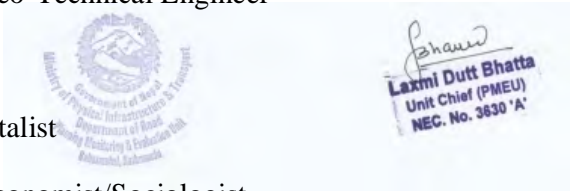
- (a) monthly progress report;
- (b) two copies of Inception report;
- (c) two copies of draft report; (min. 1 copy colour report).
- (d) Five copies of final original report with original photos .

The report mentioned in (b) & (c) shall contain a concise synopsis summarizing all major findings and recommendations of firm. The preliminary estimates of cost and benefit shall be presented in sufficient detail to permit checking of all supplementary data. The draft report shall be carefully edited and completed so that the final report can be produced with out delay.

5.5 WORKING TEAM

The working team for field and office works shall necessarily consist of the following key personnel together with adequate supporting manpower.

- a. Highway Engineer
- b. Geologist/Geo-Technical Engineer
- c. Hydrologist
- d. Environmentalist
- e. Transport Economist/Sociologist



5.6 STUDY FINAL REPORT FORMAT

REPORT FORMAT OF ALIGNMENT STUDY

ACKNOWLEDGMENTS

SYNOPSIS

SALIENT FEATURES

CONTENTS

LIST OF TABLES

LIST OF FIGURES

- 1. GENERAL
 - 1.1 Introduction
 - 1.2 Location
 - 1.3 Significance
 - 1.4 Connection with road network
 - 1.5 Map Study
- 2. DATA

—

-
- 2.1 Influence Area
 - 2.2 Socio-economic data of the influenced area
 - 2.2.1 Population
 - (1) Census
 - (2) Structure of Population
 - (3) Nature of Migration
 - 2.2.2 Land Use Pattern
 - (1) Wild life Sanctuary
 - (2) Forestry
 - (3) Agriculture Production
 - (4) Settlement Pattern
 - 2.2.3 Utility Services
 - (1) Irrigation Facility
 - (2) Electricity
 - (3) Water Supply
 - 2.2.4 Economic Activity
 - (1) Local Produces and the Resources
 - (2) Export and Import
 - (3) Major Industries and Cottage Industries
 - (4) Market and Fair
 - (5) Tourism Potential
 - 2.2.5 Health
 - 2.2.6 Education
 - 2.2.7 Transport and Communication Network
 - 2.2.8 Administrative Facilities
 - 2.3 Geology
 - 2.3.1 Geomorphology
 - 2.3.2 Local Geology
 - 2.3.3 Hydrology and Meteorology
 - 2.3.4 Hydraulics
 - 2.3.5 Hazard/Risk assessment of the alternatives
 - 2.4 Protection Measures
 - 2.4.1 Slope Protection
 - 2.4.2 Erosion Control
 - 2.4.3 Soil Conservation Measures
 - 2.4.4 River Training Works
 - 2.5 Traffic Data



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- 2.5.1 Existing roads/tracks/bridges (foot bridge also), traffic count & its reliability for analysis.
 - 2.5.2 Adjustment of traffic data in comparison of given influence population & surplus of the production.
 - 2.5.3 Passenger car unit & traffic forecast
 - 2.6 Materials Availability Data
 - 2.7 Environmental Data
 - 2.8 People's participation in Road Construction
 - 2.9 Property Acquisition
 - 2.10 Engineering Study
 - 2.10.1 Category of road & norms of road/geometric characteristic of road
 - 2.10.2 Fixing of control points, crow fly length, theoretical/practical length of alternatives
 - 2.10.3 Alignment study during the desk study
 - 2.10.4 Adjustment of alternatives after field study (giving the field data)
 - 2.10.5 Engineering comparison of the alternatives
 - 2.10.6 Structures/pavements of the road
 3. ECONOMIC ANALYSIS
 - 3.1 Construction cost
 - 3.2 Maintenance cost
 - 3.3 Road user costs (accident cost & VOC)
 - 3.4 Net and gross costs
 - 3.5 Benefit analysis
 - 3.6 Cost-benefit Ratio
 - 3.7 Economic internal rate of return
 4. CONCLUSIONS
 - 4.1 Methodology & factors affecting the ranking of the alternatives.
 - 4.2 Ranking of alternatives
 - 4.3 Discussions
 - 4.4 Conclusion
 - 4.4.1 General conclusions
 - 4.4.2 Specific conclusions
 - 4.4.3 Recommended alignment
 - 4.4.4 Feasibility for DoR undertaking
 - 4.5 Final recommendations

REFERENCES

ANNEX: Team details / used equipment / software /spread sheets (if any)

Information to be included in the SALIENT FEATURES:

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- A. Name of project:
- B. Location:
 - B.1 Geographic Location (name of the district & chainage of the recommended alignment)
 - B.2 Starting point & end point of the alignment (obligatory points of the road with latitude /longitude and name of place)
 - B.3 Geographical feature
 - B.4 Terrain
 - B.5 Climate
 - B.6 Geology
 - B.7 Hydrology
 - B.8 Meteorology
- C. CLASSIFICATION OF ROAD
 - C.1 Classification
 - C.2 Surface
 - C.3 Suggested longitudinal grade
- D. CONNECTION WITH ROAD NETWORK
- E. ALIGNMENT DETAILS
 - E.1 Previously surveyed alignment

Firm's Name & Date	Alignment -1		Alignment -2		Alignment -3	
	Route	Length (km)	Route	Length (km)	Route	Length (km)
Name of district						
Chainage (from - to)						

- E.2 Present survey
(giving the recommended alignments)

Firm's Name & Date	Alignment -1		Alignment -2		Alignment -3	
	Route	Length (km)	Route	Length (km)	Route	Length (km)
Name of district						
Chainage (from - to)						

- F. STRUCTURES
(giving the recommended alignment)

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S No	Structures	Alignment -1	Alignment -2	Alignment -3
F.1	Culverts			
F.1.1	Slab Culverts			
F.1.1.1	Span			
F.1.1.2	Number			
F.1.2	Pipe Culverts			
F.1.2.1	Diameter			
F.1.2.2	Number			
F.1.3	Drifts			
F.1.3.1	Type			
F.1.3.2	Number			
F.2	Bridges			
F.2.1	Minor Bridges			
F.2.1.1	Span			
F.2.1.2	Number			
F.2.2	Medium Bridges			
F.2.2.1	Span			
F.2.2.2	Number			
F.2.3	Major Bridges			
F.2.3.1	Span			
F.2.3.2	Number			
F.3	Retaining Structures			
F.3.1	Gabion Wall			
F.3.1.1	Height Range			
F.3.1.2	Thickness Range			
F.3.1.3	Length			
F.3.2	Stone Masonry			



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F.3.2.1	Height Range			
F.3.2.2	Thickness Range			
F.3.2.3	Length			

G. CROSS -SECTION

- (1) Right of way
- (2) Formation width
- (3) Carriage way width
- (4) Shaller width
- (5) Side drain (top width)

H. PAVEMENT

H.1 Sub-base:

- (1) Materials
- (2) Thickness

H.2 Base

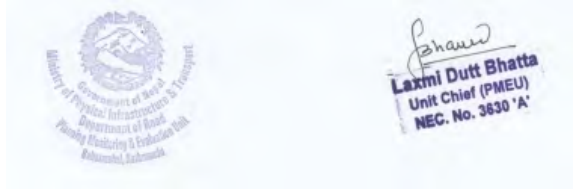
- (1) Materials
- (2) Thickness

H.3 Surface :

- (1) Type
- (2) Thickness

H.4 Sealing :

- (1) Type
- (2) Thickness



I. TOTAL TRANSPORT COST

(state the recommended alignment)

S No	Particulars	Alignment-1	Alignment-2	Alignment-3
I.1	Study & research cost			
I.2	Property acquisition cost			
I.3	Construction cost			
I.3.1	Earthwork			
I.3.1.1	Cutting			
I.3.1.3	Filling			
I.3.2	Pavement			

S No	Particulars	Alignment-1	Alignment-2	Alignment-3
I.3.2.1	Sub-base			
I.3.2.2	Base			
I.3.2.3	Surface			
I.3.3	Structures			
I.3.3.1	Culverts			
I.3.3.2	Bridges			
I.3.3.3	Retaining structures			
I.3.3.4	Side drains			
I.3.4	Other work (site clearance /road safety, etc.)			
I.4	Maintenance cost			
I.5	Road user cost			
I.5.1	Accident cost			
I.5.2	Vehicle operating cost			
Total NRS				

J. ECONOMIC ANALYSIS

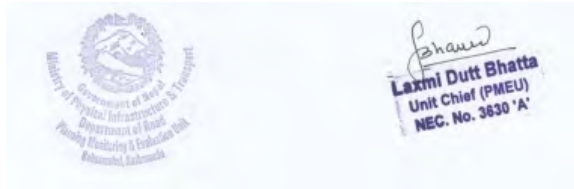
(state the recommended alignment)

S No	Particulars	Alignment -1	Alignment -2	Alignment -3
J.1	Net Cost			
J.1.1	Total			
J.1.2	Rate per Km			
J.2	Gross Cost			
J.2.1	Total			
J.2.2	Rate per Km			
J.3	Benefit			
J.4	Cost-benefit ratio			
J.5	Internal rate of return			

K. RECOMMENDED ALIGNMENT

K.1 Alignment Number

K.2 Reasons



SECTION 6: STANDARD FORM OF CONTRACT

MEMORANDUM OF AGREEMENT

(To be filled up after the Contract is awarded)

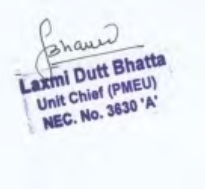
THIS AGREEMENT, made on the (Date).....between Government of Nepal, Department of Roads, Planning and Design Branch, Planning Monitoring and Evaluation Unit (herein after called as "the Department" or "the DOR") of the one part and the Consulting Firm or JV (herein after called as "the Firm" or "the Consultants") the other part.

WHEREAS, the Department is desirous that certain Professional Engineering Services should be performed viz. **Feasibility Study of... Road** the following road(s) and has accepted a proposal by the firm for the performance of such services for the total amount of NRs....., excluding VAT.
In words NRs.

The whole services comprised in the Agreement shall be completed and Draft Report submitted before (Date).....and shall perform the services in conformity in all respects with the provisions of the Agreement.

Now this Agreement witness as follows

1. In this Agreement words and expressions shall have the same meaning as are respectively assigned to them in the Condition of Engagement hereinafter, referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) The said proposal
 - (b) Conditions of Contract
 - (c) Terms of Reference
 - (d) Bill of Quantities
 - (e) Memorandum of Agreement
 - (f) Special provisions (if any)
 - (g) Appendices (if any)
 - (h) Checklists (if any)
 - (i) Addenda (if any) to the documents (a) through (h)
 - (j) Instructions to consultant (if any)
3. The Firm shall commence the Services from the date of signing of the Agreement and the services shall be completed on or before (Date).....
4. In consideration of the payments to be made by the Department to the Firm as hereinafter mentioned, the Firm hereby covenants with the Department to perform the services in conformity in all respects with the provisions of the Agreement.
5. The Department hereby consents to pay the Firm in consideration of the performance of the services and amount at the manner prescribed by the Agreement.



IN WITNESS : whereas the parties here have made and executed this Agreement as of the day, month and year first above written.

On behalf of the Department

On behalf of the Firm

Witness

Witness

1 -----

1 -----

2 -----

2 -----