



**Lekam Rural Municipality**  
**Office of The Rural Municipal Executive**  
Lekam 4 Ratamata, Darchula

**Request For Proposal (RFP)**

for conducting

Consulting Services for Feasibility Study , Detailed Engineering Survey ,Detail Design  
and Cost Estimate and DPR Preparation Of

**"Dobato-Pirtoli-Amkur-Gogana-Phusarkhali-Saina-Salyadi-Godesila-Teligaun-ganet" Road**

**RFP No : LRM 06-075/076**

2019



Web: www.lekammun.gov.np

प.सं. २०७५/७६

च.न.

गाउँपालिका स्तरिय सडकहरुको DPR तयारका लागि परामर्श सेवा सम्बन्धी प्रस्ताव पेश गर्ने बारे प्रकाशित सुचना(प्रथम पटक प्रकाशित मिति २०७६।०१।१०)

यस लेकम गाउँपालिकाको आको बार्षिक स्वीकृत नीति बजेट तथा कार्यक्रम अनुरूपका गाउँस्तरिय सडकहरुको परामर्श ७६।२०७५.ब. सेवाद्वाराDPR तयार गर्नको लागि तपशिल बमोजिमको योग्यता पुगेका फर्म/संघ/संस्था/कन्सल्टेन्सिबाट प्रथम पटक सुचना प्रकाशित भएको मितिले ७ दिन भित्र यस गाउँ कार्यपालिकाको कार्यालयमा सिलबन्दि दरभाउ पत्र प्रस्ताव सार्वजनिक खरिद ऐन २०६३ तथा सार्वजनिक खरिद नियमावली २०६४ तथा लेकम गाउँ कार्यपालिकाको मिति २०७६।०१।०७ गतेको बैठकको निर्णय बमोजिम पेश गर्न यो सुचना आवाहन गरिएको छ ।

तपशिल

सि.न.	प्रस्ताव नम्बर	सडकको नाम	विवरण	कैफियत
१	LRM-04/075-76	Detailed engineering survey, design, estimate and DPR preparation for Khetali-Badipur-Durkanda-Garadi & Girthali-Garadi-Dhami Gaun-Padi-Amkur-Ratamata Road	प्राविधिक र आर्थिक प्रस्ताव	
२	LRM-05/075-76	Detailed engineering survey, design, estimate and DPR preparation for Sera-Ratauda-Khamtad-Lali & Takana-Nailek-Tupaghar-Gorakhanath Temple-MalloSalyadi-Pariban-Sajma-Sela-Malera-Pulai-Kharkada Road	प्राविधिक र आर्थिक प्रस्ताव	
३	LRM-06/075-76	Detailed engineering survey, design, estimate and DPR preparation for Dobato-Pirtoli-Amkur-Gogana-Phusarkhali-Saina-Salyadi-Godesila-Teli gaoun-Ganet Road	प्राविधिक र आर्थिक प्रस्ताव	

गाउँस्तरिय सडकहरुको परामर्श सेवा द्वारा DPR तयार गर्नका लागि आवश्यक TOR यस कार्यालयबाट आवश्यक कागजात बुझाई माग गर्न सकिनेछ ।

दरभाउ सम्बन्धी शर्तहरू

- योग्यता पुगेका इन्जिनियरिङ्ग फर्म, संस्था, कन्सल्टेन्सी संस्था वा कम्पनी दर्ताको प्रमाण पत्र, मुल्य अभिवृद्धि दर्ता सहितको स्थायी लेखा नं. दर्ता प्रमाणपत्र, आ.सम्मको कर चुक्ता प्रमाणपत्र संलग्न राखि निवेदनमा रु ७५।२०७५.ब.१० को टिकट टाँसि सुचना प्रथम पटक प्रकाशित भएको मितिले ७ दिन भित्र यस कार्यालयको नाममा रहेको श्री राष्ट्रिय बाणिज्य बैंक दार्चुलाको 4090304018105 मा दस्तुर रकम रु १००००.०० गरेको सक्कल भौचर वा नगदी रसिद यस कार्यालयमा राजश्व शाखाबाट प्रस्ताव पत्र दस्तुर बुझाई सिलबन्दी फाराम लिन सकिनेछ ।
- इच्छुक इन्जिनियरिङ्ग फर्म/कन्सल्टेन्सी फर्मले फाराम साथ सि/संस्था/न. १ मा उल्लेखित कागजातहरुको अतिरिक्त खरिद कारवाहीमा भाग लिन अयोग्य नभएको, प्रस्तावित खरिद कारवाहीमा आफ्नो कारवाही नबाझिएको र सम्बन्धित पेशा वा व्यवसाय सम्बन्धि कसुरमा आफुले सजाय नपाएको भनि लिखित रुपमा गरेको स्वमको घोषणापत्र अनिवार्य पेश गर्नुपर्नेछ ।
- प्रस्तावदाताले प्राविधिक र आर्थिक प्रस्तावलाई छुट्टा छुट्टै रुपमा पेश गर्नुपर्दछ । एकमुष्ट पेश गरिएको प्रस्तावलाई स्विकार गरिनेछैन ।
- यो सुचना प्रकाशित भएको मितिले ८ औं दिनको दिउसो १२ बजे भित्र यस कार्यालयको दर्ता शाखामा रितपुर्वक पेश भएका प्रस्तावहरु सोहि दिनको २ बजे यस कार्यालयमा खोलिनेछ ।
- आर्थिक तथा प्राविधिक प्रस्ताव पेश गर्दा प्रस्तावदाताहरुले सार्वजनिक खरिद नियमावली २०६४ को नियम ७० को उपनियम ३ बमोजिम विवरणहरु अनिवार्य रुपले उल्लेख गर्नुपर्नेछ ।
- प्राविधिक प्रस्तावको मुल्यांकन पछि आर्थिक प्रस्ताव खोल्ने मिति यस कार्यालयबाट सार्वजनिक सुचनाको माध्यमबाट तोकिनेछ ।
- यो सम्बन्धित अन्य कार्यविधि सार्वजनिक खरिद ऐन २०६३, सार्वजनिक खरिद नियमावली २०६४ एवम् अन्य प्रचलित कानून अनुसार हुनेछ ।
- आर्थिक प्रस्तावमा दर रेट अंक र अक्षर दुबैमा लेख्नु पर्नेछ । अंक र अक्षरमा फरक परेमा अक्षरमा लेखिएको दररेटलाई मान्यता दिइनेछ ।
- कुनै कारण जनाई वा नजनाई नगरपालिकाको हितलाई ध्यानमा राखि प्राविधिक तथा आर्थिक प्रस्ताव पुर्ण वा आंशिक रुपमा स्विकृत गर्ने वा नगर्ने वा सुचना नै रद्द गर्ने सम्पूर्ण अधिकार यस कार्यालयमा सुरक्षित रहनेछ ।

## 1. LETTER OF INVITATION

लेकम गाउँपालिका  
गाउँ कार्यपालिकाको कार्यालय

लेकम ४ रातामटा, दार्चुला

E-mail:lekam.rmun@gmail.com



सुदूरपश्चिम प्रदेश, नेपाल

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## INFORMATION TO CONSULTANT



### 1. Introduction

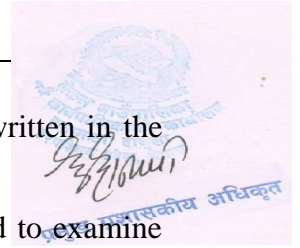
- 1.1 The Client named in the Data Sheet will select a consultant among those listed in the Letter of Invitation, in accordance with the method of selection specified in the Data Sheet.
- 1.2 The consultants are invited to submit a Technical Proposal and a Financial Proposal, for services as specified 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 licenses 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.

### 2. Clarification and Amendment of RFP Document

- 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 or electronic mail to the Client's address indicated in the Data Sheet.
- 2.2 The proponent will respond by cable, paper mail 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.
- 2.3 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 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 (TP)



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- 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. 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.
  - iii. 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.
  - iv. Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.
  - v. 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:
- i. A brief description of the consultant's organization and an outline of recent experience on assignments of a similar nature. For each assignment, the outline should indicate 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.
  - iii. A description of the methodology and work plan for performing the assignment.
  - iv. The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing.
  - v. CVs recently signed by the proposed professional staff and the authorized representative submitting the proposal. 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. Any additional information requested in the Data Sheet.

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3.5 The Technical Proposal shall not include any financial information.

Financial Proposal (FP)



3.6 In preparing the Financial Proposal (FP), the consultants are expected to take into account the requirements and conditions outlined in the RFP documents. The Financial Proposal should follow Standard Forms. 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 if applicable), 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.

#### 4. Submission, Receipt and Opening of Proposal

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 initialed by the persons or person who sign(s) the proposals.

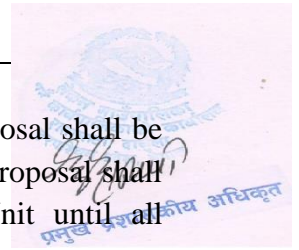
4.2 An authorized representative of the Consultants shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal.

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 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.

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- 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**

- 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 Proposal**

- 5.3 The Evaluation Committee (EC), 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 & the Data Sheet.

### **Public Opening and Evaluation of Financial Proposal**

- 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.
- 5.6 The Evaluation Committee (EC) will determine whether the Financial Proposals are complete.

## **6. Negotiation**

- 6.1 Consultant whose proposal received the highest score will be called by the client for negotiation. 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,

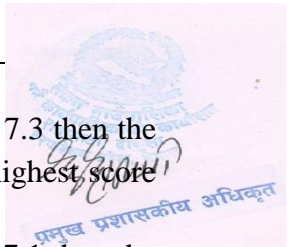
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periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the “Description of Services” and form part of the contract. Special attention will 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 6.3, the consultant, with whom agreement is reached following negotiation, shall be selected for approval of his proposal and the Client shall notify its intention to accept the proposal to the selected consultant and other -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 its 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 7 days.

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- 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 Consultant**

- 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

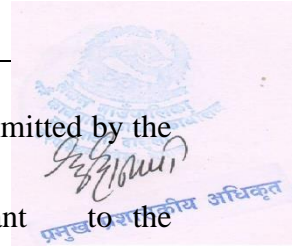


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to three years on the following grounds and seriousness of the act committed by the consultant:

- 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.



## DATA SHEET



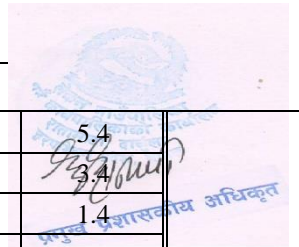
1.1	<p>The name of the Client is: <b>Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula</b></p> <p>The method of selection is: <b>Quality and Cost Based Selection (QCBS)</b></p>
1.2	<p>The name, objectives, and description of the assignment are:</p> <p><b>Name:</b> Consulting Services for Feasibility Study ,Detailed Engineering Survey ,Detail Design and Cost Estimate of <b>"Dobato-Pirtoli-Amkur-Gogana-Phusarkhali-Saina-Salyadi-Godesila-Teligaun-ganet" Road (Total approx.12KM)</b></p> <p>Estimated total cost of the assignment –<b>Nrs.</b> 70245.00/K.M.( Including all Taxes and without VAT )</p> <p><b>Objective:</b> To prepare Feasibility Study ,Detailed Engineering Survey ,Detail Design and Cost Estimate of <b>"Dobato-Pirtoli-Amkur-Gogana-Phusarkhali-Saina-Salyadi-Godesila-Teligaun-ganet" Road</b> as per ToR attached herewith.</p>
1.3	<p>A pre-proposal conference will be held: <b>No</b></p> <p>The name(s), address(es), and telephone numbers of the Client's official(s) are:</p> <p>Name: Office of The Rural Municipality Executive, Lekam Rural Municipality, Darchula</p> <p>Address Lekam-04 Ratamata, Darchula</p> <p>Telephone No. : 9759504412</p>
1.4	<p>The Client will provide the following inputs: <b>NA</b></p>
1.5	<p>Clarifications may be requested <b>3 days</b> before the submission date</p> <p>The address for requesting clarifications is:</p> <p>Client's Name : Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula</p> <p>Address : Lekam-04 Darchula</p> <p>Phone/Fax:9759504412</p> <p>E-mail:</p>
1.6	<p>Proposals should be submitted in the following language(s): <b>English</b></p>
1.7	<p>(i) Standing List listed consultants/entity may associate with other listed</p>



	<p>consultants: No</p> <p>(ii) The estimated number of professional Staff-months required for the assignment is: as per ToR attached herewith.</p> <p>(iii) The minimum required experience of proposed professional key staff is: As per ToR</p> <p>(iv) Reports that are part of the assignment must be written in the following language(s): English</p>																																
1.8	Proposals must remain valid <b>60</b> days after the deadline of proposal submission date.																																
1.9	Consultants must submit only original copies of each proposal																																
2.0	<p>The proposal submission address: Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula.</p> <p>Information on the outer envelope should also include : RFP number and name of work</p>																																
2.1	Proposals must be submitted no later than <b>2076/01/17</b> on or before (12:00 hrs) noon.																																
2.2	<p>The address to send information to the Client is:</p> <p>Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula</p>																																
2.3	<p>The number of points to be given under each of the evaluation criteria are:</p> <table border="1"> <thead> <tr> <th rowspan="2">S.NO.</th> <th rowspan="2">Description of work</th> <th colspan="2">Total Marks</th> <th rowspan="2">Remarks</th> </tr> <tr> <th>Head Marks</th> <th>Sub head Marks</th> </tr> </thead> <tbody> <tr> <td><b>1</b></td> <td><b>Specific experience of the Consultants (as a firm) related to the assignment</b></td> <td><b>10</b></td> <td></td> <td></td> </tr> <tr> <td>1.1</td> <td>Preparation of DPR of two or more roads which have at least 10 Km length each</td> <td></td> <td>10</td> <td></td> </tr> <tr> <td>1.2</td> <td>Preparation of DPR of one roads which have at least 10 Km length</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>1.3</td> <td>Preparation of DPR of one roads which have at least 5 Km length</td> <td></td> <td>2.5</td> <td></td> </tr> <tr> <td><b>2</b></td> <td><b>Adequacy of the proposed work plan and methodology in responding to the Terms of Reference</b></td> <td><b>30</b></td> <td></td> <td></td> </tr> </tbody> </table>	S.NO.	Description of work	Total Marks		Remarks	Head Marks	Sub head Marks	<b>1</b>	<b>Specific experience of the Consultants (as a firm) related to the assignment</b>	<b>10</b>			1.1	Preparation of DPR of two or more roads which have at least 10 Km length each		10		1.2	Preparation of DPR of one roads which have at least 10 Km length		5		1.3	Preparation of DPR of one roads which have at least 5 Km length		2.5		<b>2</b>	<b>Adequacy of the proposed work plan and methodology in responding to the Terms of Reference</b>	<b>30</b>		
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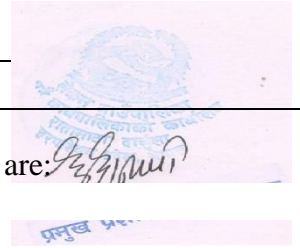
	<b>2.1</b>	<b>Understanding the Objective of TOR</b>	5	
		Good		3
		Fair		2
		Satisfactory		2
	<b>2.2</b>	<b>Comments and Suggestions on TOR</b>	5	
		Good		5
		Fair		3
		Satisfactory		1
	<b>2.3</b>	<b>Approach and Methodology</b>	10	
		Good		10
		Fair		5
		Satisfactory		3
	<b>2.4</b>	<b>Work Plan &amp; Manning Schedule</b>	10	
		Good		10
		Fair		5
		Satisfactory		3
	<b>3</b>	<b>Qualification and experience of the key staffs for the assignment</b>	<b>50</b>	
	<b>3.1</b>	<b>Qualification of the key professionals in relevant field (marks will be equally distributed among the key professionals)</b>	<b>13.5</b>	
		<b>Team Leader (Highway Engineer)</b>	<b>2.7</b>	
		Master's degree in Highway/Transport Engineering@100%		2.7
		Bachelor's degree in Civil Engineering@85%		2.295
		<b>Geotechnical Engineer/Engineering Geologist</b>	<b>2.7</b>	
		Master's degree in Geotechnical Engineering or equivalent@100%		2.7
		Bachelor's degree in Civil Engineering@85%		2.295
		<b>Hydrologist</b>	<b>2.7</b>	
		Master's degree in Water Resource Engineering@100%		2.7
		Bachelor's degree in Civil Engineering@85%		2.295
		<b>Structural Engineer</b>	<b>2.7</b>	
		Master's degree in Structural Engineering@100%		2.7
		Bachelor's degree in Civil Engineering@85%		2.295
		<b>Environmental/Environmental Engineer</b>	<b>2.7</b>	
		Master's degree in Environmental Engineering or equivalent@100%		2.7
		Bachelor's degree in Civil Engineering@85%		2.295
	<b>3.2</b>	<b>Experience of the key professionals in relevant field</b>	<b>30</b>	
		<b>Team Leader (Highway Engineer)</b>	<b>8.4</b>	
		Minimum 7 years		8.4
		Minimum 5 years		5.4
		Minimum 2 years		3.4
		<b>Geotechnical Engineer/Engineering Geologist</b>	<b>5.4</b>	



	Minimum 3 years		5.4
	Minimum 2 years		3.4
	Minimum 1 years		1.4
	<b>Hydrologist</b>	5.4	
	Minimum 3 years		5.4
	Minimum 2 years		3.4
	Minimum 1 years		1.4
	<b>Structural Engineer</b>	5.4	
	Minimum 3 years		5.4
	Minimum 2 years		3.4
	Minimum 1 years		1.4
	<b>Environmentalist/Environmental Engineer</b>	5.4	
	Minimum 3 years		5.4
	Minimum 2 years		3.4
	Minimum 1 years		1.4
3.3	<b>Experience in similar terrain</b>	<b>6.5</b>	
	<b>Team Leader (Highway Engineer)</b>	2.1	
	3 Projects		2.1
	2 Projects		1.26
	1 Projects		0.63
	<b>Geotechnical Engineer/Engineering Geologist</b>	1.1	
	3 Projects		1.1
	2 Projects		.66
	1 Projects		0.33
	<b>Hydrologist</b>	1.1	
	3 Projects		1.1
	2 Projects		.66
	1 Projects		0.33
	<b>Structural Engineer</b>	1.1	
	3 Projects		1.1
	2 Projects		.66
	1 Projects		0.33
	<b>Environmentalist/Environmental Engineer</b>	1.1	
	3 Projects		1.1
	2 Projects		.66
	1 Projects		0.33
4	<b>Suitability of the transfer of knowledge, program or training</b>	<b>10</b>	
	Good		10
	Fair		6
	Satisfactory		2
	<b>Total (1+2+3+4)</b>	<b>100</b>	

The minimum technical score (St) required to pass is 60 (Sixty) Points.

2.4	The formula for determining the financial scores is the following: [Either $S_f = 100 \times F_m/F$ , in which $S_f$ is the financial score, $F_m$ is the lowest price and $F$ the price of the proposal under consideration, or another proportional linear
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	<p>formula]</p> <p>The weights given to the technical and Financial Proposals are:</p> <p>T (Technical Proposal) = 80% and</p> <p>P (Financial Proposal) = 20%</p>
2.5	<p>The address for negotiations is:</p> <p>Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula</p>
2.6	<p>The assignment is expected to commence on 2076/01/20 at Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula.</p>

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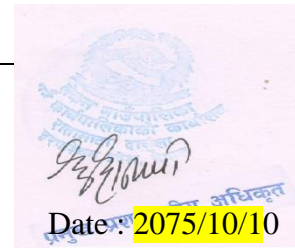
### 3. TECHNICAL PROPOSAL FORM



- 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

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**3A. TECHNICAL PROPOSAL SUBMISSION FORM**



To,  
Chief Administrative Officer,  
Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula  
Dear Sir

We, the undersigned, offer to provide the consulting services for preparation of Detail Engineering Field Survey and Report preparation of Rural Roads .in accordance with your Request for Proposal dated 2076/01/10 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, 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:

Office's Seal:



**3B. CONSULTANT'S REFERENCES**



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

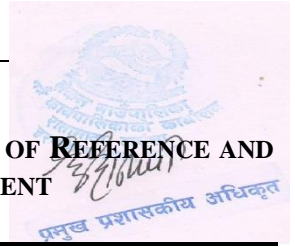
Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Consultant/Entity(profiles):
Name of Client:		No. of Staff:
Address:		No. of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services NRs
Name of Associated Consultants, If Any:		No. of Months of Professional Staff Provided by Associated Consultants:
Name of Senior Staff, Designation (Project Director/Coordinator, Team Leader etc.) Involved and Functions Performed:		
Narrative Description of Project: :( Actual assignment, nature of activities performed and location)		
Description of Actual Services Provided by Your Staff:		

Consultant's Name: \_\_\_\_\_

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

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On the Terms of Reference:

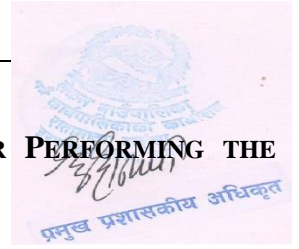
- 1.
- 2.
- 3.
- 4.
- 5.

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

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

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**3D. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT, TRANSFER OF KNOWLEDGE AND TECHNOLOGY**



**3E. TEAM COMPOSITION AND TASK ASSIGNMENTS**



**1. Technical/Managerial Staff:**

Name	Position	Task

**2. Support Staff:**

Name	Position	Task



---

**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.]

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**Languages:**

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

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**Certification:**

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

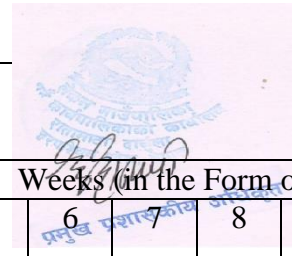
\_\_\_\_\_  
Date: \_\_\_\_\_

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

Full name of staff member: \_\_\_\_\_

Full name of authorized representative: \_\_\_\_\_

**3G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL**



Name	Position	Reports Due/Activities	Weeks (in the Form of a Bar Chart)												Number of Months		
			1	2	3	4	5	6	7	8	9	10	11	12			
																Subtotal (1)	
																	Subtotal (2)
																	Subtotal (3)
																	Subtotal (4)

Full-time: \_\_\_\_\_  
 Reports Due: \_\_\_\_\_  
 Activities Duration: \_\_\_\_\_

Part-time: \_\_\_\_\_

Signature: \_\_\_\_\_  
 (Authorized representative)

Full Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_



### 3H. ACTIVITY (WORK) SCHEDULE



#### A. Training and Field Study Items

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

#### B. Completion and Submission of Reports

Reports	Date
Inception Report	
Field Report	
Draft Report	
Final Report	



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#### 4. FINANCIAL PROPOSAL FORM

- 4A. Financial Proposal submission form
- 4B. Summary of costs
- 4C. Cost included in BoQ



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**4A. FINANCIAL PROPOSAL SUBMISSION FORM**



Date: 2076/01/

To  
Chief Administrative Officer  
Office of The Rural Municipal Executive, Lekam Rural Municipality, Darchula  
Dear Sir,

We, the undersigned, offer to provide the consulting services for Preparation of Detail Engineering Field Survey and Report Preparation of Different Rural Roads in accordance with your Request for Proposal dated 2076/01/10 and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of [Amount(s) 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.

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:

Office's Seal:

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**4B. SUMMARY OF COSTS**

<b>Particulars/ Items</b>	<b>Amount(s) in NRs.</b>
Cost of the Field Survey (A)	
Cost of the Office Work (B)	
Miscellaneous Cost (C)	
Total (A+B+C) without VAT	
Value Added Tax @ 13%	
Total Amount of Financial Proposal (Including VAT)	

#### 4C. COST INCLUDED IN BOQ



##### A. Cost of the Team Members Field & Office Work

S.N.	Team Members	Unit	Required Quantity			Rate/Month (NRs.)	Total(NRs.)
			Office	Field	Total		
		m-m					
		m-m					
		m-m					
<b>Sub Total (A)</b>							

##### B. Cost of the Support Staff at Field & Office Work

S.N.	Team Members	Unit	Required Quantity			Rate/Month (NRs.)	Total(NRs.)
			Office	Field	Total		
<b>Sub Total (B)</b>							

##### C. Miscellaneous Cost

SN	Items	Unit	Required quantity	Rate (NRs.)	Total Cost
<b>Sub Total (C)</b>					

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**TERMS OF REFERENCE FOR PREPARATION OF DETAIL PROJECT REPORT (DPR) CONSISTING OF DETAILED ENGINEERING SURVEY, DESIGN, DRAWING AND COST ESTIMATE, ROAD INVENTORY OF PROPOSED ROADS.**

### **1.0 Introduction**

Nepal having poverty-stricken rural countryside communities, rural development is one of the main agenda of development. The ultimate goal of rural development is attainment of sustainable livelihood and improved well-being of rural people. In the absence of better access to the goods and services that they value the same suffers. Rural people's needs for sustainable livelihood and improved well-being are such that they require better access to information, markets and opportunities; they need better access to health, education and other goods and services.

The consulting service has to conduct detail engineering survey, design and prepare detail drawings and cost estimate according to based on the 'DoLI Technical guideline (Nepal Rural Road Standards) Including criteria fulfilling in Annex A .

### **1.1. Objectives**

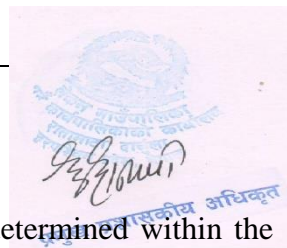
The overall objective of the consulting services is to prepare conduct detailed engineering survey, design and prepare detailed drawings and cost estimate of rural roads of the rural municipality . The consultant should follow the DoLIs Norms, Specifications and design standard.

The specific objectives, but not necessarily limited to the following, are:

- Analyze the existing situation on topographic map as well as on field.
- Conduct detailed engineering survey of the alignment and its corridor.
- Conduct hydrological studies for cross drainage works and fixing of embankment height.
- Design the road details.
- Prepare working drawings.
- Prepare cost estimate with analysis of rates.
- Prepare survey and design reports.

### **1.2. Scope of Services**

The consulting service is to provide high quality professional services for detail engineering survey, design and prepare detail drawings and cost estimate according to the 'DoLI Technical guideline (Nepal Rural Road Standards) on Planning and DoLIs design standard, Design and Construction of Rural Roads'. The consultant shall carry out the necessary field works along the alignment. The team personnel to be mobilized for field visit and schedule of field tasks should be prepared and should be included in the proposal. The center line should be set out with proper establishment of bench marks, as far as possible following the existing trail or alignment. The consultant shall then carry out further survey works necessary for detailed design of the road. The consultant shall be responsible for the analysis and interpretation of the data. The scope of services to be carried out by the Consultant shall broadly include, but not be limited to, the following:



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### 1.2.1. Engineering Details (Field Survey)

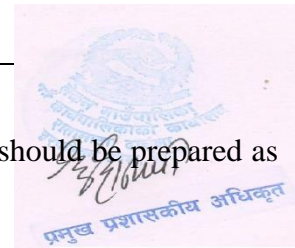
- The horizontal alignment of the road (i.e. centre line) should be determined within the survey strip of proposed corridor of the optimum alignment between control points specified as a result of the engineering investigation.
- Accurate traverse line shall be run along the route selected.
- In case of improvement of existing road, efforts should be made to adjust the alignment so as to match the existing road track wherever possible.
- Strip of sufficient width (10m on either side) to accommodate cut/fill and for possible shift in the centre line at the final design shall be surveyed.
- Traverse survey shall be done by Total station/Theodolite with angles using double reversed method.
- Appropriate and accurate method shall be adopted for the distance measurement between two consecutive transit stations.
- Transit stations shall be pegged and numbered following a sequential order.
- Features like buildings, monuments, cremation center and graveyards, temples, power and telephone lines, pipelines, existing roads and trails shall be located by offset measurements from the traverse line.
- Cross section shall be taken at 15-20 m interval and at closer intervals in places having abrupt slope changes or different soil type.
- Classification of soil chainage wise is absolutely necessary.
- Benchmarks shall be fixed at every 250 m intervals or at 500 m intervals in special cases. Benchmarks shall also be fixed at bridge and culvert sites.
- Check all levels with the levels of established Benchmarks by fly leveling for accuracy.
- Single datum preferably geodetic survey datum shall be used to tie up all levels.
- Grid survey at 1 or 2 m intervals may be necessary at places of sharp curves of difficult places and at all bridge sites.
- Data information should be taken on all gullies, depressions, streams and rivers where cross drainage structures are required.
- Every retaining structures, breast structures, drainage structures, slope protection measures should be supported by justification and photographs.
- Road Inventory with details such as: existing retaining walls, check dams, chutes, pipe and slab culverts, causeways, drain, rehabilitation of existing cannel works and other structures and the consultant shall produce road inventory drawings as per DoLI or other appropriate formats

### 1.2.2. Environmental Consideration

The basic intention of environmental consideration is to develop the best possible rural road in the given environmental settings. Environmental consideration basically addresses two aspects: risks or threats, which are the likely damages to the environmental quality, services and natural wealth; and opportunity or potential in the given natural setting for road works to harness the same. Environmental considerations should, therefore, focus on avoiding or minimizing damages and, at the same time, promoting sensible use of opportunities to improve the natural environment. So, during the detail site visit consultant should prepare the site specific

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Environmental Management Plan (EMP) of the proposed roads. The EMP should be prepared as per prescribed format by DoLI.



### 1.2.3. Engineering Design Calculation

Engineering design must be shown with calculation. The format should be described properly declaring the meaning and source of variable, constants and multiplication factors should be referenced and justified. Technical Guidelines on Planning, Design and Construction of Rural Roads provided by DoLI should be strictly followed in design works. The road should be designed according to all weather road (well graded gravel surface)

### 1.2.4. Preparation and Presentation of Project Documents

All project data and information collected during the above survey should be compiled as a project document. The project document should comprise of:

- report
- cost estimate, and
- construction drawings

#### 1.2.5.1. Report

It contains the following:

- a) Background Information
  - Name of the work and its scope of activities
  - Authority and plan provision
  - History, geography, climate, etc.
  - Necessity, or other words, project justification
- b) Road's Salient Features
  - Route selection
  - Alignment
  - Environmental considerations
  - Right of way, roadway, carriageway and other cross-sectional elements
  - Salient features of road structures
  - Present / anticipated traffic
- c) Road Design and Specification
  - Road design
  - Pavement design (Gravel Surface)
  - Protection works (other than cross - drainage works)
  - Specifications
- d) **Drainage facilities including cross-drainage structures**
  - Discuss investigations carried out



- Give details of the surface / sub-surface drains and drainage measures, attach design calculations / drawings.
- Highlight and propose special measures to check soil erosion and environment.
- Discuss the proposals on small cross-drainage structures i.e. Culverts / causeways.
- In case of improvement of existing roads, list out the cross-drainage structures proposed to be improved.
- State whether any standard designs were followed.

**e) Materials, Labor and Equipment**

- Type, quantity and specifications of materials required and their availability.
- Type, number and skills of labor required and its availability.
- Type, number and specifications of tools/equipment/plants required.

**f) Rates**

- Give reference to the schedule of rates of the year adopted.
- Highlight the items for which suitable rates are not available in the schedule and for such items give reference to the analysis of rates attached to the estimate.

**g) Construction Schedule**

- Mention the proposed system of work execution to be adopted
- Mention the proposed project period.
- Discuss the prevailing and anticipated constraints to project implementation
- Draw up a construction schedule in the form of bar chart along with the responsible parties. This should be done after scheduling the activities according to the Critical Path Analysis.

**h) Miscellaneous**

- Indicate the camping, store and office requirements.
- Mention identified diversions and borrow pit.
- Mention arrangements for water supply and other site amenities.
- Indicate proposed roadside plantation and wayside amenities.
- To prepare the EMP

### 1.2.5.2. Cost-Estimate

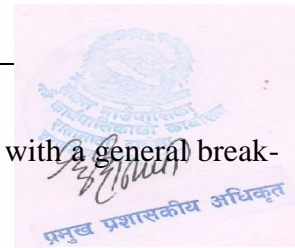
The project's cost-estimate should provide all financial requirements and it should be realistic too. In the project's cost-estimate, it is ensured that all

- The work items are carefully listed.
- The quantities are determined to a reasonable degree of accuracy, and
- The rates provided are workable.

The cost -estimate should consist of

- A general abstract of cost , and
- The detailed cost - estimate for each major activity as described below.





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General abstract of cost provides the total cost of the scheme along with a general break-down given under the following major heading:

- Site clearance
- Earthwork
- Sub-bases
- Bases
- Surfacing
- Cross drainage and other structures
- Provision for tools, equipment and plants
- Provision for contingencies
- Work charges of the establishment
- Quality control, etc.

The detailed cost-estimate for each major activity consists of

- Abstract of cost
- Estimate of rates for work items not covered by relevant schedule of rates and
- Chart of quarry / material sources

Where the project work is proposed to be executed in stages, the cost – estimate should be prepared for each stage separately. The cost- estimates for respective stage should be presented in a logical sequence.

### 1.2.5.3. Construction Drawings

The construction drawings should clearly show and interpret the proposed works in relation to the existing features with other necessary information for accurate translation of the proposed in the field. All the drawings should follow a uniform standard with regard to:

- Size
- Scale, and
- Details

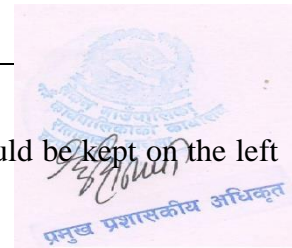
#### a) Drawing size

Drawing should be of adequate size to accommodate a reasonable length of the road or an independent structure such as a culvert in full details but, at the same time, should not be incontinently large which may require many folds.

The appropriate size of a drawing sheet is 297 mm x 420 mm corresponding to A3 size which can easily be stitched in a folio. The standard size of the folded compact is 297 mm x 210 mm.

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To facilitate the stitching of drawings into a folio, a margin of 40 mm should be kept on the left hand side of the drawing sheets.



The following working drawings shall be prepared for implementation of the works using computer software or manually as appropriate:

- General plan of project site showing the distance from the project area to construction materials and quarry sites in appropriate scale. Road plan in 1:1000 scale, which shall include detailed working drawings and setting out data such as centre line coordinates, deflection angles and other parameters of horizontal alignment setting
- Description card (D-card) with full details of benchmarks and points along centre line, minimum of 4 reference points per km i.e on an average one peg in each 250 m including location sketches, level and coordinates as appropriate.
- Profile at H1:1000 and V1:200 (for hills) or V1:100 (for plains) scale indicating existing ground situations, proposed designs, existing soil type, lengths and type of drains and mass manage and haulage plan.
- Cross-sections incorporating structures at 1:200 scale at all centre line pegs at 15-20 m interval or less and 10 m either side of centre line with existing ground situations, proposed designs and data such as existing ground level, proposed ground level, area of cut, area of fill, soil type and drain type etc.
- Detailed working drawings and setting out data - centre line coordinates, deflection angles and other relevant data of horizontal alignment setting.
- Similarly, vertical alignment setting data.
- Typical working drawings for all other structures.
- Earthwork quantities (cut and fill) shall be prepared on spread sheet computer program based on cross-sections
- Bill of Quantity should be broken down and grouped contract package wise.

## **b) Component of a set of Project Drawings**

- i) Locality map-cum-site plan
  - Key map also called as locality map
  - Index map also called as site plan

Key map and index map are usually drawn in a single sheet and this sheet forms the first sheet in the folio of project drawings.

Where the length of the road is substantially long, locality map and site plan are separated in such a manner that locality map is accommodated in one sheet and the site plan on a series of sheets.

The locality map or “Key Map” should be draw to a scale of 1:250,000 and should have a bird’s eye view of the proposed work with respect to the

- Road network serving the area
- Important town / village centers, and

- 
- Other prominent places

The site plan or “Index Map” should be drawn to a scale of 1:25000 and should show the project road with chain ages and its immediate neighborhood covering the important physical such as hills, rivers, tracks, main trails, etc.

The sheet which contains the locality-cum-site plan should have a legend to explain the abbreviations and symbols used in subsequent drawing sheets. Alternately, the legend could be shown on a separate sheet at the beginning of the folio.

- ii) The elements in a rural road are generally same for most of the length. They are:
  - Width of carriageway
  - Width of roadway, i.e. formation width
  - Width of shoulder
  - Right of way
  - Side slopes
  - Pavement cross fall

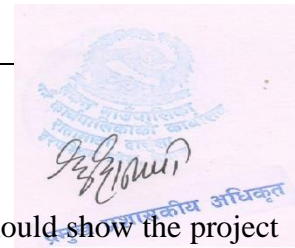
It is desirable to show the above mentioned elements as a typical section instead of repeating the same details on every cross-section.

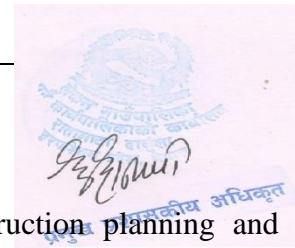
- iii) The cross-sections of the road should be presented serially according to the chainage starting from 0+000. Each sheet should accommodate a number of cross-sections.
- iv) Standard design and drawings of cross-drainage structures should be used wherever possible, thus avoiding repetitive design/drawing work for similar structures. The drawings should be prepared for all:
  - Cross-drainage structures
  - Retaining walls
  - Breast walls, and
  - Other road side structures

The drawings should show clearly the details of foundation, proposed materials, etc. and should be prepared on a scale which is large enough to accommodate all details comprehensively.

#### **1.2.5.4. Bill of Quantities**

Bill of quantities of a project should cover all the required items listed in the cost estimate. All the details of labor and materials should be given as a break-down under respective work item. In general, quantities of the work items and their units should be given in the approved format.





### 1.2.5.5. Schedules of Labor and Materials

Schedules of labor and materials are essential, in advance, for construction planning and management purposes.

### 1.3. Use of Computer and Design software

Consultants are encouraged to use computers and appropriate design software. The consultant should submit the soft (electronic) copy of reports of the total output of the works.

### 1.4. Liaison with engineer in-charge

The consultants are required to maintain close liaison with the Municipality Engineer. Draft design for alignment, earthwork and pavement design and other technical aspects of the design shall be discussed with the Client Engineer for approval prior to proceeding with the final detailed design.

### 1.5 Client's Proposed Composition of Staff

a) Professionals:

- Team Leader
- Hydrologist
- Geologist/Geo tech engineer
- Structural Engineer
- Environmentalist
- Surveyor

b) Support Staffs

- Sub Engineer
- Auto CAD Operator

### 1.6. 1 Qualification and Experience:

#### WORKING TEAM

The working team for field and office works should necessarily consist of the following Key Personnel together with adequate supporting manpower.

S. No.	Proposed Personnel	Qualification & Work Experience
1	Team Leader-1 (Highway Engineer)	Master's degree in Highway / Transport Engineer with Minimum experience of 7 years from Master's degree in relevant field
2	Geotechnical Engineer/ Engineering Geologist-1	Must be a Master degree in geotechnical Engineering with minimum 3 years of working experience in the relevant field.

3	Hydrologist-1	Master's degree in Hydrology/water Resource Engineering with Minimum 3 years' experience after master degree
4	Environmental/Environmental Engineer-1	Master degree in Environment or Environment Engineering with minimum 3 years' experience from Master Degree
5	Structural Engineer-1	Master degree in Structural Engineering with minimum 3 years' experience from Master Degree
6	Civil-1	Must be a Bachelor in civil engineer with minimum 3 years' experience from Bachelor
7	Surveyor-1	Must be a Diploma in Geometric engineer with minimum 3 years' experience from diploma Degree

### 1.7. Duration of the Study and Reporting

The duration for the assigned task is two month. The consultant shall submit the following reports:

- i) Inception report** The consultant shall submit 2 (Two) copies of Inception report within 2 week of signing the contract agreement for the consulting services.
- ii) Draft report:** The consultant shall submit 2 (Two) copies of the draft report within 1.5 months of signing the contract agreement for the consulting services. The report should have Three volumes. **Volume I** should contain the main report ,Volume II cost estimate and Drawings **Volume III** should contain detail engineering drawings, maps and contract documents. (bidding documents, Technical specifications of each packages)
- iii) Final report:** The consultant shall submit 3 (Three) copies of final reports within 15 (Fifteen) days after receiving comments, incorporating comments and suggestions on the draft reports. The report should be also in Three Volumes of each, as mentioned for draft report. The final report and maps should be in hard as well as in soft copies in CD or Pendrive .

Note:- Before replacing proposed staff approval is required from client.

### 1.8 Indicative Reporting Outline

Acknowledgement  
Synopsis  
Salient Features  
Summary of Cost  
Table of contents  
Executive Summary

#### 1. Introduction



- 
- 1.1 Background
  - 1.2 Objective
  - 1.3 Scope and Limitation
  - 1.4 Approach and Methodology

## **2. Geometric Design Standards**

- 2.1 Road classification, traffic and loading
- 2.2 Design speed
- 2.3 Horizontal curves
  - 2.3.1 Minimum radius of curve
  - 2.3.2 Super elevation
  - 2.3.3 Transit curves
  - 2.3.4 Extra widening
- 2.4 Vertical curves
  - 2.4.1 Minimum radius of curve
  - 2.4.2 Gradient
- 2.5 Sight distance
- 2.6 Lateral and vertical clearance
- 2.7 Right of way
- 2.8 Sign posts

## **3. Alignment Survey**

- 3.1 Survey procedure
- 3.2 Alignment description
- 3.3 Bench marks and other reference points
- 3.4 Materials survey

## **4. Engineering Design**

- 4.1 Horizontal alignment
- 4.2 Vertical alignment
- 4.3 Cross-section design
- 4.4 Drainage
- 4.5 Pavement design
- 4.6 Cross-drainage structures
- 4.7 Retaining structures
- 4.8 Breast structures
- 4.9 Road side development works
- 4.10 Measure for environment protection
- 4.11 Bio-engineering measures.

## **5. Quantity Survey and Cost-Estimate**

- 5.1 Project costs
  - 5.1.1 Summary of cost
  - 5.1.2 Cost of site clearance



- 
- 5.1.3 Cost of earthwork
  - 5.1.4 Cost of cross-drainage works
  - 5.1.5 Cost of retaining structures
  - 5.1.6 Cost of breast structures
  - 5.1.7 Cost of slope protection
  - 5.1.8 Cost of pavement construction if any
  - 5.1.9 Cost of road side development works if any

- 6. Conclusion
- 7. Recommendation

### **1.9. Proposal Submission**

The consultants shall submit technical and financial proposals under two-envelope system. The technical and financial proposals must be enclosed in separate wax sealed envelopes, clearly mentioning the type of proposal (Technical and Financial) and name of the task on the envelope. Then both the sealed envelopes must be enclosed in an outer waxed sealed envelope, clearly stating the name of proposal, purchaser's address and the firms' name and address.

### **1.10. Payment Schedule**

The payment schedule will be as per the following:

After submission of inception report = 30% of the total contract amount.

After submission of the draft report = 50 % of the total contract amount.

After submission and approval of the final report = 20% of the total contract amount.

### **Notes:**

- a) The standards are mainly adapted from Nepal Rural Road Standards (NRRS), 2013. However, in some cases separate standards are proposed where NRSS standards are found to be inadequate or missing.
- b) VPD - Vehicles per Day (VPD) as per definitions of NRRS, 2013.
- c) Main objective of the capping layer is to increase CBR of sub grade to at least 10%. Locally available suitable materials will be used for the capping layer.