

Terms of Reference

PROPOSED MIZORAM STATE ROADS II REGIONAL TRANSPORT CONNECTIVITY PROJECTS (P145778)

Project Management Consultant (PMC)

1. Introduction:

The Government of Mizoram (GOM) has completed improvements of 440 Kms of State Highways and MDRs under Mizoram State Road Project - I (MSRP-I) financed by World Bank. Considering the success and impact of MSRP I, Government of Mizoram has proposed Mizoram State Road II – Regional Transport Connectivity Project (MSRII-RTCP) to improve another 99 Kms of State Highways and MDRs for the stage 1 of first group of roads (Group 1 Roads totaling to 156kms). Improvement of the remaining 57 kms road under Group 1 roads is proposed in phase II. In addition Govt. of Mizoram is in the process of preparation of detailed studies and designs (Detailed project report) for another 330 kms of roads (Group 2 roads) in the north south corridor.

Government of Mizoram through Government of India (GOI) is in the process of obtaining a credit from the International Development Association (IDA) as financial assistance for the construction cost of the MSRII-RTCP, which aims at Up-gradation of 99 Km length of State Highways and Major District Roads in the stage 1 of first group of roads (part of the Group 1 Roads totaling to 156 kms) and preparation of detailed studies and designs for another 330 kms roads under Group 2.

The Public Works Department (PWD) Mizoram is the implementing agency for the project. A dedicated project implementation unit (PIU) has been established in Chief Engineer (Road) Office of Mizoram PWD, headed by a Project Director and supported by other staff. PIU is responsible to implement the project with support from various units of PWD. PWD is now proposes to engage a Project Management Consultant, hereafter called Consultant to assist it to effectively implement and administer the project focusing on both the quality and timely implementation of various project components. The consultant is essentially to provide high quality management and implementation support (through a small team of experts) to PWD by working as an integral part of the PIU. It has to be recognized that the Consultant will generally not have a direct role to implement the project, except that is required in delivering the TOR. The PMC will be basically a extended team of PIU, PWD, Mizoram.

- 1.1 The consultant will be selected in accordance with the procedures set out in the World Bank's Guidelines : Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers (Jan 2011 “ Consultants Guidelines”).
- 1.2 PWD , Mizoram is in process of hiring consultancy services for construction supervision of stage 1 roads of Group 1 roads and also for the preparation of detailed studies & designs for Group 2 roads. Consultants hired for these services will not be considered for these services of PMC.

2 Scope of Services

Main Goal: The main goal of the services is to provide high quality professional advice and management and implementation support to help PWD to effectively implement various project components. The consultant will be required to work in close coordination with and as an integral part of PWD. The Consultant will also focus on consistency and compliance with the agreed World Bank procedures and on achieving the key results to be achieved during project implementation. The main tasks are as below:

Task 1: Effective Preparation and Implementation of Road Improvement Works (99 km):

- i. Assist PIU, PWD, in close association with the construction supervision consultants, in effective implementation of the road improvement works contracts including handling design changes during execution, variations between the detailed engineering designs and cost-estimates and the actual execution, enforcing contract conditions and mobilization of the contractors on the works to remove any faults and omissions, monitoring physical and financial progress, and timely Implementation, Performance Review of the contractors of Road Improvement Works. The Consultant shall undertake field visit to each road package at quarterly intervals to review the overall quality of works, performance of the contractors, physical and financial progress vis-à-vis the original plans, quality of supervision by the Supervision consultant and PWD field staff, compliance to the agreed contract conditions, management of social and environmental aspects including land availability and statutory permissions, contractual disputes, variations between original BOQs and the actual BOQs, design changes required during execution to remove any faults and omissions, and any other factors affecting project implementation. Based on his review the consultants will establish any performance shortfalls along with the reasons for those and recommendations to address the shortfalls.
- ii. Provide support to the PIU in management and administration of the Contract Agreements with the civil contractors engaged for various components under the project.
- iii. Provide support to the PIU in the management of consultants appointed for the preparation of detailed studies & designs of Group 2 roads including finalization of the alignment based on the surveys conducted, engineering designs, site selection and design of cross drainage structures, traffic surveys and pavement design etc. PMC will also provide support to the PIU in finalization of re-alignments / bye passes, if any required, for making the alignment / realignments most feasible & economical as per the best engineering practices. PMC will also provide support to the PIU in processing the detailed designs & cost estimates of these Group 2 roads.
- iv. Provide support for the performance of such tasks related to the project implementation and management as may be assigned by the Chief Engineer/ Project Director, PIU, PWD from time to time.
- v. Assist the PIU in the management and administration of the design consultants for Group 2 roads, construction supervision of Group 1 roads and other consultancies, as well as monitoring their outcomes and deliverables;

Task-2: Training and Capacity building

- i Assist PWD in establishing a training and capacity building plan covering various categories of staff and its implementation.
- ii Assist PWD in implementing various measures to build capacity of the local construction industry.
- iii Assist the PWD in preparing and holding Stakeholder's workshops to present and discuss the state's road sector expenditure program , institutional development strategy and build consensus on the objectives , scope and implementation arrangements for the state roads project;
- iv Assist PWD in effectively implementation of various training programs using local, national and international training institutions, facilitate other knowledge transfer and capacity building activities like workshops and study tours in various states in the country and abroad to expose PWD staff to national and international engineering & asset management activities.
- v Support the PWD in identifying the equipment and instruments required to improve their overall office infrastructure for surveys and investigations, quality assurance, project preparation and implementation, computing capacity and introducing new technologies.
- vi Support the PWD in procurement of the equipment and instruments
- vii Assist PWD to strengthen the Mizoram PWD Central laboratory.
- viii PMC shall review the functioning of the project implementation arrangements at the PWD HQ during the course of his services. Based on his review he will advice PWD from time to time at least at quarterly intervals about the modifications and further strengthening required in the project implementation arrangements including reorientation of the project teams and implementation responsibilities, additional inputs required for effective project implementation, and other recommendations to improve project outcomes.

Task 3: Procurement

- i. Assist the PIU in the procurement of contracts including evaluation of bids / proposals, negotiations of contracts, award of contracts and drafting of the final contract documents
- ii Assist the PIU in the procurement of various consultancies under the project, in this case, to avoid possible conflicts, the project management consultants (and its sub consultants), however, will not be allowed to participate (either in joint venture or as sub consultant) in providing such services , except in extra ordinary cases with the approval of both the GOM& World Bank
- iii Assist PWD in maintaining all relevant records pertaining to procurement of works , goods and consultancies.
- iv Assist PIU in enhancing skills of Mizoram PWD Staff in procurement.
- v Review the overall procurement performance including the level of competition, capacity of the construction industry in the state of Mizoram, general bid prices vis-a-vis the engineer's

estimate, packaging of bids, quality of bid documents and staffing for procurement in the PIU.

- vi Review whether the evaluation committee kept in view the basic principles of economy, efficiency, equal opportunity, transparency and bid capacity criteria while undertaking the evaluation of bids and making recommendation for acceptance / rejection.
- vii Review how the complaints regarding evaluation of bids / bidders during the contract award process were handled.
- viii Review whether contracts procurement process and related reports are properly documented and contract registers are maintained in the prescribed formats.

Task- 4: Assist the PIU in preparation of Supporting Documentation for the Project.

- i. Assist the PIU in preparing documentation / various progress reports to be submitted to World Bank and GOM and also required for Bank missions in connection to the Project. This documentation would include details of the scope of the road improvement works, costs, environmental examination, social impact and resettlement impacts.
- ii. Assist the PIU in preparing Periodic Finance request report (PFR) to be submitted to World Bank in connection with the reimbursement of the expenditure made on monthly basis or at the frequency prescribed by the World Bank.
- iii. Any other reasonable assistance that may be required by PWD during the course of the implementation of the project that could be accommodated by the PMC without deploying additional manpower and incurring additional costs.

3 Reporting Requirements

3.1 The Consultant will submit the following Reports:

- (a) Inception Report: to be submitted within one month after the date of commencing the services. The Inception Report shall specify the detailed methodology, staffing schedule, and the inputs required from PWD to deliver the services.
- (b) Quarterly project progress reports as per task narrated under para 2 above.
- (c) Reports to be discussed during the various implementation support mission of the World Bank.
- (d) Consultancy completion Report: Upon completion of the services containing the main lessons learnt from the assignment.

3.2 Quantity: Five (5) hard copies in English, and Electronic copy in PDF format suitable for posting on PWD websites.

3.3 The consultant shall discuss and agree with PWD about the contents of the reports.

4. Consultant's Team

4.1 The project will finance Project Management Consultants to support high quality and timely implementation of the project. As a result of the project funding, levels of work outputs are expected to increase significantly. The services of the PMC are expected to provide the required management support to achieve the planned outputs. Particular attention will be given in the evaluation of proposals on how the consultant team mobilizes to provide support to the PWD. Consultants are encouraged to propose a staffing plan and mobilization plan that best suits the needs of the project. 110 person months of key professionals are anticipated to be required for this assignment over a four year period. Consultants shall make the provision accordingly as proposed below in their financial proposals.

5. The core team of the PMC key personnel will consist of:

- a) Team Leader cum Senior Highway Engineer – regular input.
- b) Contract Management cum Procurement Specialist – intermittent input
- c) Survey Engineer – intermittent input
- d) Bridge Engineer – intermittent input
- e) Engineering Geologist – intermittent input

5.1 The experience and qualifications of the key personnel would be as under:

- i. Team Leader cum senior Highway Engineer– The candidate should have a postgraduate degree in Civil Engineering (Highway/Transportation/Geotechnical). The person will be a senior highway engineer with minimum 15 years experience, including at least 10 years relevant experience in similar projects. The incumbent must have at least 2 years of experience as Team Leader / Resident Engineer and work experience of 5 years in projects funded by international financing institutions. Thorough experience on design, procurement and management of major highway projects is essential. Knowledge of international 'best practices' and modern highway construction technology is important. The candidate must have proven record as Team Leader for preparation and implementation of a large project or as project manager for several projects concurrently.
- ii. Contract Management cum Procurement Specialist - The candidate should have a degree in Civil Engineering with minimum 15 years of experience of which at least 7 years on contract management and procurement of works . The person should have at least 5 years experience on major highway projects funded by international lending agencies. In depth knowledge and experience on FIDIC conditions of contract, preparation of pre-qualification documents, evaluation of prequalification applications, preparation of civil works bid documents, bid evaluation are essential.

- iii. Engineering Geologist: He should have post graduate degree in Engineering geology or Masters degree in Soil/Rocks Mechanics. He should have working experience of at least 10 years in the field of infrastructure projects, out of this at least 5 years on highways projects. Should have relevant knowledge of slope protection in different types of rocks. He should also have relevant knowledge of Bio Engineering measures to be adopted for slope protection / stabilization.

- iv. Survey Engineer: He should be degree in civil engineering with 7 years of experience or diploma in civil engineering / surveying with 10 years of relevant experience .He should have working experience of at least 5 / 7 years in highways projects. Should be well versed with modern survey equipments and surveying techniques. He must have at least three years working experience in hilly areas. He should have knowledge of setting out centre line of the highway projects. He should also have knowledge of Lidar surveying. Experience of lidar surveying is essential requirement.

- v. Bridge Engineer: The candidate should be at least graduate in the field of civil engineering. Post Graduate qualification in the field of structural engineering is desirable and will attract additional weightage. He should have relevant professional experience of at least 15 years; out of this period, he should have worked for at least 10 years on bridge construction projects including 3 years in design and 4-5 years in construction of bridges. The candidate must be familiar with modern methods of construction of bridges, design methods & standards, technical specifications and statistical Quality Control/Assurance procedures for construction of different component of bridges. Experience in construction of deep foundations viz. pile foundations and PSC type of bridges construction is essential. He should have experience of at least 3 years in the Construction/Construction Supervision of major bridges in hilly areas.

5.2 The function of team leadership will be dealt with by the Team Leader. The Contract Management cum Procurement Specialist could also be designated as team leader with prior approval of the PWD.

5.3 During the implementation of the project, the Team would need to be supplemented with other support staff and associated specialists and advisers from time to time to provide support in accomplishment of various assignments indicated in para 2 above.

6. Inputs by the PWD

6.1 The Consultant will work as part of the PIU office and PWD will provide access to the required information and other assistance as required to effectively undertake this assignment. This includes office accommodation to the Consultant's team in PWD office at Aizawl (Unfurnished without furniture and other logistics), access to field laboratories, other surveys

and investigation facilities available with PWD. Electricity & water including watch and ward facility shall also be provided free of cost by PWD.

6.2 The Consultant will make his own provisions for office furniture, equipment, computers, transport, site visits, and consumables and make provisions for the same in his financial proposal. Wherever available, PWD could provide accommodation to the consultants team in its rest houses on chargeable basis. FURNITURES / FURNISHERS/ EQUIPMENTS / COMPUTERS / LAPTOPS etc purchased against the project at the cost of PWD shall be the property of PWD after the completion of the project. The Consultants shall handover the same to PWD in working condition. For transport, the consultants shall make provision for the rental of vehicles including running and maintenance charges in their financial proposals. No provision for purchase of vehicles shall be made by the consultants in their financial proposals.

7. Deliverables:

Quarterly progress reports and other reports as per the Task 3 narrated above. In addition the consultants will be required to provide its comments on various documents and reports to be prepared during the course of the implementation of project. Review reports on various project related documents shall also be submitted by the consultants as required by the Chief Engineer / PIU.

8. Schedule of Completion of Tasks of Consultant

The implementation of the project is envisaged for a period of four years.