Municipal Development Fund of Georgia Asian Development Bank (ADB)

Loan N 2655 - GEO: SUSTAINABLE URBAN TRANSPORT INVESTMENT PROGRAM

Expert for Review of the Investigation of Structural Integrity of, and Impact of Vibration and Noise on Buildings at a Segment of Tbilisi-Rustavi Road Project (Section 2, km 5,2-6,9), and for Consulting MDF during the Implementation of the Investigation

Ref. No: SUTIP-IC-12-2014

The Project is funded by the Government of Georgia (GoG) and the Asian Development Bank (ADB). The Municipal Development Fund of Georgia (MDF) is the project executing agency. The Project envisages Modernization of Tbilisi-Rustavi Section of the Tbilisi-Red Bridge (Azerbaijani Border) Road. Under this project the Municipal Development Fund of Georgia announces Expression of Interest for selection of International Individual Consultant for Review of the Investigation of Structural Integrity of, and Impact of Vibration and Noise on Buildings at a Segment of Tbilisi-Rustavi Road Project (Section 2, km 5,2-6,9), and for Consulting MDF during the Implementation of the Investigation.

The main objective of this assignment is to assist to the MDF and review of the results of Investigation of Structural Integrity of, and Impact of Vibration and Noise on Buildings at Section 2 km 5,2-6,9 segment of Tbilisi-Rustavi Road Project; and providing expert advice during the Implementation of the Investigation assignment to the Consultant performing the Investigation, the JV performing Detailed Engineering Design of the road, as well as MDF. The scope of the consultant assignment will also include providing expert advice to MDF for evaluating the technical part of proposals to select the Consultant for the Investigation assignment, confirming acceptance of the completion of the tasks of the investigation assignment as well as approving of relevant intermediary and final reports of the investigation.

The Scope of Work of the Consultant includes, but not limited to the following tasks:

Task 1: Consultancy provided at the stage of the selection of the Consultant for investigation works, including performing and/or providing designated MDF staff with:

- (i) Review and assessment of the relevance and quality of the technical parts of the proposals submitted by the interested bidders to the investigation assignment:
- (ii) Particular clarifications to be sought from the bidders on the technical parts of proposals, primarily methodology of works;
- (iii) Expert assessment of comparative strengths and weaknesses of the proposals under review during selection and scoring process.

Task 2: Consultancy provided at the inception phase of the investigation, including performing and/or providing designated MDF staff with:

- (i) Review, assessment and quality assurance of the Consultant's organizational arrangements, detailed methodology and plan or works, and assessment of core staff and equipment designated for conducting of works:
- (ii) Conferring with the Consultant on the relevant matters subject to verification, clarification or improvement;
- (iii) Review and quality assurance of the inception report and plan of work submitted by the Consultants well as providing requests for relevant clarifications, comments, improvements and amendments as required; and
- (iv) Confirming the acceptability of quality and content the final inception report after clarifications and amendments for its formal acceptance and approval by MDF.

Task 3: Quality assurance of the inventory of the building premises and 3D mapping of the required investigation area, including performing and/or providing designated MDF staff with:

(i) Review, assessment and quality assurance of the outputs of the inventory of the current state of buildings (including inventory of damages in all premises in the buildings);

- (ii) Review, assessment and quality assurance of the 3D map of the required investigation area derived by the Consultant;
- (iii) Comments and suggestions for improvement required for acceptance of the outputs of the task and relevant follow up with the Consultant on improvements as required;
- (iv) Notice of acceptance of the outputs of the task for technical quality.

Task 4: Quality assurance of the study of the major parameters of the structural integrity of buildings, including performing and/or providing designated MDF staff with:

- (i) Review, assessment and quality assurance of the outputs of the investigation of the structural integrity of buildings (including the data of structural parameters of concrete in major spots of interest, and investigation of the current state of the fundament);
- (ii) Comments and suggestions for improvement required for acceptance of the outputs of the task and relevant follow up with the Consultant on improvements as required;
- (iii) Notice of acceptance of the outputs of the task for technical quality.

Task 5: Quality assurance of the investigation of soil parameters for determining the impact of vibration and possible change in ground water conditions, including performing and/or providing designated MDF staff with:

- Review, assessment and quality assurance of the outputs of the investigation of soil parameters required for determining the impact through propagation of vibration through sub-soil strata and impact from the change in ground water conditions resulting from earth removal to be performed during construction works;
- (ii) Comments and suggestions for improvement required for acceptance of the outputs of the task and relevant follow up with the Consultant on improvements as required;
- (iii) Notice of acceptance of the outputs of the task for technical quality.

Task 6: Quality assurance of the dynamic modeling using relevant software to determine the vibration impact during construction and noise impact during road exploitation, including performing and/or providing designated MDF staff with:

- (i) Review, assessment and quality assurance of the outputs of dynamic modeling using relevant software to determine the vibration impact during construction;
- (ii) Review, assessment and quality assurance of the outputs of dynamic modeling using relevant software to determine noise impact during road exploitation:
- (iii) Comments and suggestions for improvement required for acceptance of the outputs of the task and relevant follow up with the Consultant on improvements as required;
- (iv) Notice of acceptance of the outputs of the task for technical quality.

Task 7: Quality assurance of general recommendation on the relevant measures to mitigate the vibration impact during construction, including performing and/or providing designated MDF staff with:

- (i) Review, assessment and quality assurance of the recommendations derived through investigation and analysis;
- (ii) Comments and suggestions for improvement required for acceptance of the outputs of the task and relevant follow up with the Consultant on improvements as required;
- (iii) Notice of acceptance of the outputs of the task for technical quality.

Task 8: Providing expert input during the final presentation of findings and quality assurance of the final report of the consultant, including performing and/or providing relevant MDF staff with:

- (i) Expert input during the presentation and discussion of the findings of the investigation made by the Consultant for MDF and clarifications requested on the relevant matters;
- (ii) Quality assurance of the final report of the Consultant;
- (iii) Comments and suggestions for improvement required for acceptance of the outputs of the task and relevant follow up with the Consultant on improvements as required;
- (iv) Notice of acceptance of the outputs of the task for technical quality.

Task 9: During the implementation of the tasks above, performing and/or providing relevant MDF staff with:

(i) Advice on contract changes, resolution of contractor claims and scope revisions;

- (ii) Ensuring that all works performed by Consultant are carried out in full compliance with international quality standards;
- (iii) Progress monitoring for the Consultant works against agreed plan of works, advise the MDF on measures to be taken to improve progress and quality, reviewing and advocating proposed variation orders and providing expert advice on possible alternatives;
- (iv) Review and approval of Variation Orders initiated by the Consultant or Employer.

Tentative duration of the Contract is 6 months. The Consultant is requested on intermittent basis.

Knowledge and qualifications:

- a) Extensive professional experience of 10 years or more in the field of evaluating and performing investigation of structural integrity of buildings;
- b) Proven extensive expertise in the methodologies, staff qualification, equipment, organization of work and analytical tools including software relevant to the task;
- c) Expert knowledge of and experience with relevant technical standards for the similar investigation works:
- d) Advanced/graduate degree in geophysics or structural engineering;
- e) Membership of reputable professional associations and established professional reputation in the field are strongly preferred;
- f) Fluency in written and spoken English and good communication and reporting skills.

Interested Individual Consultants may obtain additional information at the Procurement Unit at the address provided below from 10:00 a.m. to 18:00 p.m. Phone number: (+99532) 243 70 01, extension 409, Ms. Nata Peitrishvili, Procurement Specialist.

Interest expression with CV shall be submitted at the address provided below not later than 18:00 p.m. of April 22, 2014.

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