REQUEST FOR EXPRESSIONS OF INTEREST

Project Name: Muhanga-Rubengera (Muhanga-Nyange Section) Road Project

Title of the Tender: Muhanga-Rubengera Road Project: Design Review, Road Safety Assessment/Audit, Monitoring and Supervision of Road Works for Widening and Rehabilitation of Muhanga-Nyange Road Section (24 km).

Scope of Services: Review of Detailed Design, Road Safety Assessment/Audit, Preparation of Tender Documents and Execution Supervision.

Client/Employer: The Rwanda Transport Development Agency (RTDA)

Funding Source: Kuwait Fund for Arab Economic Development (KFAED)

1. The Rwanda Transport Development Agency (RTDA) (hereinafter called “Client”) received financing from the Kuwait Fund for Arab Economic Development towards the cost of the subject road section.

2. The Client intends to apply a portion of the funds to eligible payments under the contract for the consulting services for review of detailed engineering designs, carry out road safety assessment/audit, preparation of tender documents, monitoring and road works execution supervision for the widening and rehabilitation of Muhanga-Nyange road section (24km). The services include but not limited to the financial and economic analysis including the role of the Engineer’s Representative to undertake the design review, road safety audit and supervise construction of the Works (on behalf of the Employer) throughout the entire construction period of 42 Months, including 18 months of the Defects Liability (maintenance) Period, and to ensure that the works are constructed according to the General and Special Conditions of Contract, the Technical Specifications and drawings, Road Safety Analysis including the role of the Engineer’s Representative to undertake the design review, road safety audit and supervise construction of the Works (on behalf of the Employer) throughout the entire construction period of 42 Months, including 18 months of the Defects Liability (maintenance) Period, and to ensure that the works are constructed according to the General and Special Conditions of Contract, the Technical Specifications and Engineering Drawings or any amendments thereto.

3. To be considered, a similar reference must be accompanied by a certificate of completion issued by the client; iii. Must demonstrate experience in FIDIC contract for works of Civil Engineering construction.

4. RTDA now invites eligible Kuwaiti consulting firms (KCFs) licensed and registered in Kuwait. A shortlisted KCF is required to form a joint venture with a locally registered Rwandan consulting firm. Shareholding proportion of the Joint Venture will be 60% and 40% in terms of key staff input and scope of services for the Kuwaitis and Rwandans, respectively. In order that any consulting firm may be eligible for shortlisting as Kuwaiti or Rwandan, such firm must be beneficially owned to the extent of at least 50% by Kuwaiti or Rwandan Citizens, respectively.

5. Interested eligible firms must provide statement of capability and experience indicating that they are qualified to perform the services (Certificate of incorporation, licenses, brochures, description of similar assignments in similar conditions including certificate of completion, availability of the appropriate skills among staff, etc., and evidence of financial capacity). At this prequalification stage, Kuwaiti consulting firms will be assessed on a standalone basis.

6. To be shortlisted, a consulting engineering firm should fulfil at least the following criteria:

   i. At least 15 years of demonstrable knowledge and experience in the detailed engineering design, construction supervision and contract management of consultancy services for road construction/ rehabilitation works;
   
   ii. To have carried out at least 2 similar projects by nature, scope and dimension, successfully completed in the last 10 years one of which must have been in Africa or in developing countries. The last 5 years shall indicate the most recent successful performances. To be considered, a similar reference must be accompanied by a certificate of completion issued by the client; iii. Must demonstrate experience in FIDIC contract for works of Civil Engineering construction.

Eligibility criteria, establishment of the short-list and the selection procedure shall be in accordance with GUIDELINES FOR THE USE OF CONSULTANTS of the DEVELOPMENT INSTITUTIONS MEMBERS OF THE ARAB COORDINATION GROUP. Following the evaluation of the prequalification documents, a short list consisting of (6) prequalified KCFs will be established. Every shortlisted KCF will be furnished with the RFP and invited to submit their technical and financial proposals in Joint Venture with an RTDA-accredited Rwandan consulting firm.

7. Interested consultants may obtain further information at the address below during office hours from 7:00 am to 5:00 pm local time on Monday to Fridays (except on public Holidays), or by e-mail from the addresses below.

Expressions of interest written in English language, must be sent by electronic mail (e-mail) to the address below by 08th March 2022 at 5:00 p.m., local time (3:00 p.m. GMT) and mention “EOI for Design review, road safety assessment/audit, Preparation of Tender Document and Monitoring and Supervision of road works for rehabilitation and widening of Muhanga-Nyange Road section (24km). The address is:

Attn: Director General

Kigali-Rwanda Transport Development Agency/ Procurement Unit

KG 563St, Queen’s LAND House, 1st Floor

P.O Box: 6674, Kigali-Rwanda

Email: procurement@rtda.gov.rw

info@rtda.gov.rw

Sincerely,

Imena MUNYAMENDA

Director General
2.1 The Objective

The consulting services required for the Project will be procured in accordance with the following procedures: A Notice will be published on the websites Inviting KUWAITI CPs to submit their Expression of Interest (EOI) to conduct the services. The short-listed KUFWs will be invited to submit their technical and financial proposals in association with (Joint Venture) a prequalified Local Consulting Firm (LCF), and on the basis of a fully termed request for proposals (RFP). LCF will be required to submit a proposal with three options: (1) technical assessment, (2) financial assessment, and (3) economical assessment, as follows:

(a) Review and verify all primary and secondary data for the Project;
(b) Update/Carry out topographical survey for the Project road section including updating the topographical map and all other necessary data for the detailed engineering design, which includes:
   i) Updated/Establishment of horizontal and vertical control points (benchmarks);
   ii) Topographical profile survey covering at least thirty five (35m) on both sides of the road center line and reflecting all natural changes and man-made structures with contour lines;
   iii) River cross-section survey at bridge location.
(c) Update and verify all data related to environmental impact assessment (EIA) and propose possible relocation sites with the Utility Relocation Maps. Also provide cost estimates for relocation of utilities to be included in the bidding documents for works;
(d) Update/Carry out subsoil investigation but not limited to boring and laboratory tests at Nyabarongo bridge location and soft soil section, as well as CBR tests and other necessary tests at other road sections at appropriate internal and provide sub-soil investigation maps;
(e) A specific report on slope stability assessment by a probabilistic assessment of slopes instability and by identifying signs of slope instability which may include slumped soil; tension cracks; eroded material at the base of the slope; broken or uneven terrain; leaning trees; water seeps, ponds, or channels; or other signs of surface erosion. The report should propose a cost-effective and sustainable road slope stabilization and erosion control and be reflected in the updated BoQ.
(f) Update/Carry out detailed engineering design and construction drawings and specifications of the entire Project. The consultant shall make an assessment of the current status of road section included in the bidding documents for works;
(g) Update/Carry out material availability survey to identify quarries, borrow and disposal areas for the Road Project and construct the roadway sections and provide materials inventory survey for the Road Project;
(h) Update/Collect base line data for environmental monitoring during the construction works including water quality, air quality and noise pollution etc.;
(i) Update/Carry out subsoil investigation on how it should be improved through application of speed limits, signaling and infrastructure enhancements and be adjusted from the detailed design and BoQ. The consultant shall conduct on-site verification of the characteristics of the urban environment, including day and night inspection of the area, analyzing it from the perspective of pedestrian safety and pedestrian visibility in the evening and on weekends and during nighttime pedestrian presence of facilities such as intersections.
(j) The consultant shall provide specific design improvements, such as signaling, ramps, traffic calming elements, improvement of enforcement scheme, etc. These designs will serve for the whole duration of the project.
(k) The enhanced economic activities are expected to create job opportunities for all in this part of the country. The existing 24km road of 6-meter width require additional land to read the carriageway to 7.4 meters with 1.5 meter shoulders on both sides. The works also include the widening of the existing Nyabarongo bridge which is 120 meters long. The road is designed for 10 ton load and will be covered using asphaltic concrete. The works include road works, drainage, utilities and guard-rails. The Client is expected to file an application for a loan from AfDB with a minimum of 50% equity contribution.
(l) The consultant should remain answerable for potential requests for clarifications from bidders on the prepared design documents and Bidding Document and remains as such until the final version of the documents is released and submitted.

2.2.2.3 Road Safety Assessment/Audit
The purpose of this audit is to identify current and potential safety problems for all road users along the road corridor: pedestrians, cyclists, motorcyclists, car passengers, etc. and recommend measures to manage these risks through either mitigation or exposure reduction. The consultant shall make an assessment of the current status of road section included in the bidding documents for works; and for the whole duration of the project.

2.2.2.4 Monitoring and supervision of road construction works
The Consultant shall perform his duties during the contract implementation period of the contract to be executed by the Client (RTDA) and the Contractor. The Consultant shall:
(a) Ensure that construction works supervision and contract administration services in accordance with the power and authority to be delegated by the Client as stipulated in his contract;
(b) Provide assistance to the Client concerning variations and claims which are to be be ordered/issued at the initiative of the Client. Advise the Client on resolution of any dispute with the Contractor;
(c) Issue instructions, and propose additional changes or corrections as appropriate prior to notification to the Client;
(d) Provide recommendations to the Client for acceptance of the Contractor’s performance security bond, as such, financial and performance bonds and required insurance; and
(e) Provide a supplementary order to the Contractor upon approval of the Client;
(f) Assess adequacy of all inputs such as materials, labor and equipment provided by the Contractor;
(g) Check and approve the Contractor’s method of work, including site organization, program of work, performance quality assurance system, safety plan, method statements of safety, and environmental monitoring plan so that the requirements set forth in the applicable laws and regulations, the specifications or other parts of the contract are to be duly respected;
(h) Monitor physical, human and financial progress, and take appropriate action to expedite progress if necessary, so that the time for completion set forth in the contract will be duly respected by the Contractor;
(i) Advise the Client concerning variations and/or discrepancies in the Contract Documents and issue any necessary clarifications or instructions. Issue further drawings and give instructions to the Contractor for any works which may not be sufficiently detailed in the contract documents, if any.

2.3 The Executing Agency of the Project on behalf of the GoR
Rwanda Transport Development Agency (RTDA -the Client).
Type of Report | No. of Copies
--- | ---
Inception Report | 5
Inception Report (and As-built Drawings included) | 5
Technical Report | 10
Environmental Monitoring Report | 5
Evaluation Report | 10
Completion Report (and Air-Drawings included) | 3
Detailed Design Phase and Safety Audit Phase | 4
Detailed Bidding Documents | 5
Environmental and Social Safeguard | 3
Environmental and Social Safeguard | 10
Environmental and Social Safeguard | 5
Environmental and Social Safeguard | 5
Other Report | As required or upon request

Detailed Design Review and Road Safety Assessment/Audit Phase (Duration: 3 months)
- Preview Report: Prepare the Standards Documentation that is addressed in advance with the Fund.
- Detailed Design Report: The consultant shall ensure the client engage the entire documentation through the detailed design engineering report.
- Final Design Report: Compile all the items carried out during detailed design and all comments handled during the study phase.
- Quality Control systems: The consultant shall prepare and submit to RTDA Employer's documents including conditions of contract, set of design drawings, and design of the MS-Excel or similar system for recording the baseline and periodic data.
- Final reports: Review and approve the Contractor's working drawings, shop drawings, and drawings for temporary works. Also review and approve, if any, design prepared by the Contractor to any tasks conducted within the scope, including preparation of technical approvals/additional contract documentation, and review and comment on the contractor's proposals.
- Close the scope: Confirm the consultant shall apply all the services to the service projects prior to the completion.
- Preparation of the project: Prepare the submission of the final reports to RTDA as shown in the table. The consultant shall, in addition, to the complete version, provide electronic readable copy of each of these reports.

Category | Type of Report | Timings | No. of Copies
--- | --- | --- | ---
Detailed Design Review and Road Safety Assessment/Audit Phase | Within 20 days after commencement of the services | 4
Environmental Monitoring Report | Within 5 months after commencement of the services | 10
Detailed Bidding Documents | Within 3 months after commencement | 3
Report and Bidding Documents | Within 1.5 months after commencement of the services | 10
Environmental Monitoring Report | Every Quarter | 10
Completion Report (and Air-Drawings included) | At the end of the project | 10
Construction Supervision Phase | Environmental Monitoring Report | Every Quarter | 5
Environmental and Social Safeguard | Evaluation Report | At the end of the project | 5
Environmental and Social Safeguard | At the end of the project | 5
Other Report | Environmental Monitoring Report | Every Quarter | 5
ASSISTANCE TO RTDA IN THE ENVIRONMENTAL IMPACT ASSESSMENT PHASE
1. Technical services with responsibility for preparing the Environmental Impact Assessment (EIA) Report and update the works implementation schedule, highlight any unforeseen delays, and timely propose corrective measures; 2. Perform the inspection of the works, including Test on Completion, and to propose to the client the issuing of the certificates such as the Taking-Over Certificate, Performance Certificate as specified in the contract; 3. Verify and approve the as-built drawings prepared by the contractor; 4. The Consultant shall ensure skills transfer to the International Experts to the Local Professionals already part of the proposed Consultant's team; 6.5.2.2 Monitoring of the effectiveness of EMP and negative impact on environment caused by the construction works and provide technical advice, including a feasible solution, so that RTDA can improve situation when necessary; 6.5.2.3.1.1 Monthly Progress Report: Describes briefly and concisely all activities and progress for the previous month by the 7th day of each following month. Problems encountered or anticipated will be clearly stated, together with actions to be taken or recommendations on remedial measures for correction. Also indicates the work to be performed during the coming month. 6.5.2.3.1.2 Environment and Social Safeguards: Included in the monthly progress report is the following:
- Monthly Progress Report: Describes briefly and concisely all activities and progress for the previous month by the 7th day of each following month. Problems encountered or anticipated will be clearly stated, together with actions to be taken or recommendations on remedial measures for correction. Also indicates the work to be performed during the coming month.
- Completion Report (and Air-Drawings included): At the end of the project.
Defects Liability Period (Duration: 18 months)

The minimum duration of the construction contract is eighteen (18) months. During this period, the Consultant shall reduce the supervision staff accordingly. Staff mobilization and demobilization plans are to form part of the Consultant's technical proposal and related financial proposal. Where subsections of the road will be handed over as work progresses, the Defects Liability Period will start at the date of handover of the last sub-section of the road.

During this period, the Consultant shall undertake the following:
(a) Prepare and submit the Draft Completion Report, within one month from the commencement of the ‘Defects Liability Period.’
(b) Impede the works every after a period of at least four (4) months during the Defects Liability Period, with the preparation of deficiency list if required, supervise the remedial works and recommend to the Employer on the proposed date of the final inspection of the works after the end of Defects Liability Period.
(c) Carry out the final inspection of the Works with the Contractor and the Employer's representative.
(d) Prepare the “Final Completion Certificate” for signature by the Employer upon satisfactory completion of works.
(e) Prepare and submit the Final Completion Report.

Consultant’s Quality Assurance Manual

The Consultant shall ensure that the methodology and procedures to be followed in attaining the desired quality of the service at each stage. The report should also detail assignment of responsibilities with regard to quality assurance to the respective personnel in the team. The content of the manual shall be suggested by the consultant for review by RTDA and will be finalized taking into account RTDA’s comments.

3. Expected Time Schedule

The minimum duration of consultancy services will be 45 months. Tentative implementation schedule expected is as shown below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Key Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2023</td>
<td>Commencement of Consultancy Services</td>
</tr>
<tr>
<td>October 2022</td>
<td>Completion of detailed design, Road Safety Assessment/Audit, preparation of Drawings and tender documents</td>
</tr>
<tr>
<td>March 2023</td>
<td>Tender process for works</td>
</tr>
<tr>
<td>March 2023</td>
<td>commencement of collapse</td>
</tr>
<tr>
<td>March 2023</td>
<td>End of Civil Works</td>
</tr>
<tr>
<td>Merit 2025</td>
<td>Defects Liability Period</td>
</tr>
<tr>
<td>April 2026 to September 2026</td>
<td>Closure of Consulting Services</td>
</tr>
</tbody>
</table>

4. Staffing (Experienced)

The duration for consultancy services is 45 months considering 3 months of design updating phase and road safety assessment/Audit, 24 months for works supervision and 18 months for Defects Liability Period.

The consultant should elaborate needed time inputs for each expert in accordance with his understanding of terms of reference and scope of services and reflect it in his Financial Proposal.

4.1 Qualification of Key Experts

The qualification of Key Experts is shown as below.

(i) Resident Engineer

- A minimum of BSc. Degree in civil engineering and Fifteen (15) years of experience in relation to road projects. He/She must be a member of recognized engineers’ professional organization.
- Ten (10) years minimum experience as Project Manager or Resident Engineer in managing or administering of road projects of at least similar magnitude and complexity with works of Construction/upgrading/rehabilitation/Projects; and representing any of the three parties in construction/rehabilitation contracts out of which seven (7) years is on large highway construction Contracts of Asphalt Concrete road projects. Knowledge of FIDIC Contract procedures (Arab Development Funds, WB, EU and ADB) will be an advantage. He/She shall have worked on at least (3) similar and same complexity projects. Previous experience on road projects in Africa will be an advantage.

(ii) Assistant Resident Engineer

- Must be of Rwandese nationality.
- A minimum of BSc. Degree in civil engineering and seven (7) years’ experience in relation to road projects. He/She must be a member of recognized engineers’ professional organization.
- Five (5) years of experience as Project Manager or Resident Engineer or Assistant Resident Engineer in managing or administering of road projects of at least similar magnitude and complexity with works of construction, upgrading or rehabilitation projects representing any of the three parties in contracts.
- He/She must have previous relevant experience on large highway construction Contracts with particular experience in estimation of quantities, writing administration, and management of works. He/She must be familiar with latest highway design computer applications. Knowledge of FIDIC Contracts (Arab Development Funds, WB, EU and ADB) will be an advantage. Previous experience on road projects in Africa will be also an advantage.

(iii) Geotechnical/Pavement/Material Engineer

- A minimum of BSc. Degree in Civil Engineering or related field with at least ten (10) years professional experience and Eight (8) years’ experience on road projects. He/She must be a member of recognized engineers’ professional organization.
- Experience as a Geotechnical/Pavement Material Engineer on Two (2) road supervision projects of at least similar magnitude and complexity with works of construction. Uppropriate experience with laboratory, responsible for routine testing of all materials and ability to assess the performance test and soil stabilization.
- A specific experience on slope stability analysis and software is required. Previous experience on road projects in Africa will be an advantage.
- He/She must have at least five (5) years of experience in road construction materials, geotechnical surveys, testing and pavement design, highway construction, particularly in tropical countries.

(iv) Highway Engineer

- A minimum of BSc. Degree in Civil Engineering or equivalent and with at least Ten (10) years professional experience. (He/She must be a member of recognized engineers’ professional organization.
- Experience as an Highway Engineer on Three (3) road supervision projects of at least similar magnitude and complexity with works of construction, upgrading or rehabilitation.
- He/She must have at least Eight (8) years of recent experience in geometric and design/supervision of roads using the latest highway design computer applications and other topographic and drafting computer applications. Previous experience on road projects in Africa will be an advantage.
- Experience of at least Five (5) years experience in structural analysis, design/supervision or construction of bridges, road drainage structures including urban drainage systems and buildings. He/She must be familiar with latest electronic survey equipment including DOPS, Total Stations and associated drafting computer applications (applications for ‘Computer Aided Design). Previous experience on road projects in Africa will be an advantage.

(v) Structural Engineer

- A minimum of BSc. Degree in civil engineering or related field and Eight (8) years’ experience in road bridge and building projects. He/She must be a member of recognized engineers’ professional organization.
- He/She must have at least five (5) years experience in structural analysis, design/supervision or construction of bridges, road drainage structures including urban drainage systems and buildings. He/She must be familiar with the latest electronic survey equipment including DOPS, Total Stations and associated drafting computer applications (applications for ‘Computer Aided Design). Previous experience on road projects in Africa will be an advantage.
- He/She shall be responsible for ensuring the bridges and other drainage structures are constructed according to design and conform to the Contract specifications and able to propose technical solution due to the geotechnical test result.

(vi) Senior Surveyor/Topographical engineer

- He/She must possess BSc. Degree in Surveying or equivalent and with at least Seven (7) years professional experience. (He/She must be a member of recognized engineers’ professional organization.
- He/She must have served in similar capacity in at least two (2) road projects of at least similar magnitude and complexity. (He/She must be familiar with the latest electronic survey equipment including DOPS, Total Stations and associated drafting computer applications (applications for ‘Computer Aided Design). Previous experience on road projects in Africa will be an advantage.
- He/She must have at least Ten (10) years professional experience, good knowledge of modern topographic survey equipment. (S)He must be able to prepare road geometric design drawings and carry out estimation of quantities and write technical specifications. Experience on road projects in Africa will be an advantage.

(vii) Environmentalist/Social Safeguard Resettlement Expert

- A minimum of BSc Degree in Environmental Management or relevant fields with five (5) years professional experience. (S)He/She must be registered as Lead Expert (REMA) or equivalent.
- He/She must have a minimum of four (4) years working experience on environmental/social Resettlement management with sound knowledge of environmental and social/safeguard management and implementation of mitigation measures in construction of bridges and road works. Previous work done on highway project would be an added advantage.
- He/She shall be responsible for ensuring the bridges and other drainage structures are constructed according to design and conform to the Contract specifications and able to advise the consultant’s technical proposal.
- He/She must have at least Five (5) years experience on road safety audits and inspections, traffic analysis, crash data analysis or road safety measures: 6 years experience as a lead road safety auditor of road safety audits and inspections of a similar nature; must have undertaken at least 2 road safety audit assignments on a road project within the last 5 years.
- He/She must hold a valid certification in road safety audit procedures. Experience in road safety audit in the region, would be an asset.

(viii) Claims Expert

- A minimum of BSc. Degree in civil engineering or related field with ten (10) years of experience in contract administration and/ or claims handling. (S)He must be a member of recognized engineers’ professional organization.
- (S)He must have extensive broad experience in highway Contract administration, evaluation of Contractors claims for at least eight (8) years and more specifically have recent experience as a Claims Expert on at least one highway construction Contract of comparable magnitude. Knowledge of FIDIC Contract procedure is desirable.
- The expert is to be mobilized upon approval by the client.

The consultant should determine whose staff is in need of induction during phase, supervision phase and defect liability phase considering allocated duration of services of each phase and his understanding of terms of reference as well.

4.2 Scope of works for the respective personnel

The Consultant should give though the technical proposal the Detailed information on the major tasks and duties each member of the detailed engineering design team and the consultant's Technical and Financial Proposal.
In addition to the key staff designated above, the consultant shall determine the support and backup staff deemed necessary to assist with the design and supervision of works. Other than above, supporting staff such as office manager, secretary, accountant, site supervisors, CAD operators as well as surveys, lab technicians are to be assigned by consultant.

Further, the above list of staff is for reference and the Consultant may modify it or propose additional experts and supporting staffs required to accomplish the tasks outlined in the TOR.

5. Obligations of RTDA

A certain range of arrangements and services will be provided by RTDA to the Consultant for smooth implementation of the Consulting Services. This will include:

1. **Report and Data**
   - Make available to the Consultant existing reports and data related to the Project.

2. **Cooperation and Counterpart Staff**
   - Appoint counterpart officials, agent and representative as may be necessary for effective implementation of the Consulting Services;

3. **Assistance**

   - RTDA will provide liaison with other Ministries/Institutions/Departments/Districts of the Government in order to introduce the Consultant. The Consultant shall be fully responsible for collection of data and information from these agencies.

   - RTDA will, if required, assist the Consultant in obtaining Visas, Work Permits, Driving Licenses, Car registrations and other formalities for all Consultant Personnel entering or leaving Rwanda, for the purpose of carrying out the Services in line with the Agreement.

4. **Facilities to be provided by the client during Supervision phase**

   a) **Accommodation, laboratory and survey equipment and site offices and furniture for Key Experts during project implementation phase (only during works supervision)** should be ensured by RTDA through civil works contract and located in the nearby town or village to the site where it is convenient to go to the site. The design of accommodation and offices will be decided at the Design review Stage in this contract.

   b) **The vehicles and drivers for consultant (a) key staff during project implementation phase (only during works supervision phase) should be ensured by RTDA through work contract. The numbers of vehicles are at least (5) five. The exact number of vehicles will be decided at the Design review Stage in this contract, and then included to the tender document for works. The vehicles for supervision consultant should be exclusive use of consultants at the site and will be handed over to RTDA at the end of the Project. The vehicles should be four-wheel drive and with necessary equipment for supervision.