REQUEST FOR EXPRESSIONS OF INTEREST

Tender Reference Number: 001/CS/2021-2022/ICB/RTDA-BADEA&OFID
Project Name: Nyacyonga-Mukoto Road Project
Title of the Tender: Nyacyonga-Mukoto Road Project: Design Review, Monitoring and Supervision of Road Works for Upgrading Nyacyonga-Mukoto Road (36 km).
Scope of Services: Review of Detailed Design and Execution Supervision.
Client/Employer: The Rwanda Transport Development Agency (RTDA)
Funding Source: Arab Bank for Economic Development in Africa (BADEA) and the OPEC Fund for International Development.

1. The Rwanda Transport Development Agency (RTDA) (hereinafter called "Client") received financing from the Arab Bank for Economic Development in Africa (BADEA) and the OPEC Fund for International 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/update of detailed engineering designs, monitoring and road works execution supervision for the upgrading of Nyacyonga-Mukoto road section (36 km). The services include but not limited to the role of the Engineer's Representative to undertake the design review and supervise construction of the Works (on behalf of the Client) throughout the entire construction period of 54 Months, including 18 months of the Defects Liability Period, and to ensure that the works are constructed:
   i. In accordance with the General and Special Conditions of Contract, the Technical Specifications and Engineering Drawings or any amendments thereto;
   ii. So far as is reasonably possible, within the Contract Price and Time for Completion allowed under the Contract or any agreed amendments thereto.
   iii. By optimizing the use of available material resources to minimize costs to the Client or to maximize the quality of the Works or expedite construction.

3. The request for expression of interest is only open to Arab, Africa or Arab-Africa consulting firms registered in Rwanda or Arab countries. In the case of the Joint-Venture shareholding proportion will be 60% and 40% in terms of key staff input and scope of services for the Arab and African firms, respectively. In order that any consulting firm may be eligible for shortlisting as Arab, Africa or Arab-Africa, such firm must be beneficially owned to the extent of at least 50% by Arab or Africa Citizens, respectively.

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4. RTDA now invites eligible Arab, Africa or Arab-Africa consulting firms to indicate their interest in providing the above-mentioned services.

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, Arab consulting firms will be assessed on 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 past 10 years one of which must have been in Africa or in developing countries. The firm 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 OPEC Fund and BADEA’s procedures. Following the evaluation of the prequalification documents, a short list consisting of (6) prequalified consulting firms will be established. Every shortlisted consulting firm will be furnished with the RFP and invited to submit their technical and financial proposals.

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 12/08/2022 at 04:00 p.m, local time (GMT+2) and mention “EOI for Design review and Monitoring and Supervision of road works for upgrading of Nyacyonga-Mukoto Road section (36 km). The address is:

Attn: Director General  
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 MUNYAMPENDA  
Director General

Website: https://www.rtda.gov.rw
TERMS OF REFERENCE

Prequalification of Consulting Firms for the Provision Consulting Services

Project: Upgrading Nyacyonga-Mukoto Road (36 km)

Type of Assignment: Design Review, Monitoring and Supervision of Works Execution

1. Background

1.1 Project Background

Rwanda is a landlocked country with high transport costs, particularly on major road corridors used for trade. Apart from facilitating the transport of people and local produce, it is to reduce the cost of trade that the country has gradually undertaken development works on these major corridors, as well as developing alternative routes to relieve the overloaded trade roads. The proposed Project Road, which supports the objectives of the country’s National Strategies for Transformation (NST1) and vision 2050. The NST1 came after the implementation of two, five-year Economic Development and Poverty Reduction Strategies—EDPRS (2008-12) and EDPRS-2 (2013-18), under which Rwanda experienced robust economic and social performances.

The Nyacyonga-Mukoto road which will be referred to as the “Project” is based on the feasibility and detailed studies conducted by the Ministry of Infrastructure through Rwanda Transport Development Agency (RTDA), which have been completed in November 2016. The current gravel/murrum road (Nyacyonga-Mukoto) follows the topography of the region from flat homogeneous areas to undulating completely open areas, then mountainous areas with many very difficult sections, ranging in height from sea level within 1700-2000 meters.

The project area enjoys a moderate and humid climate with the succession of the four seasons (long dry season, average rainfall, short dry season, and heavy rain) and the annual rainfall ranges between 908-1845 mm. In general, Rwanda enjoys moderate and stable temperatures throughout the year, and in the region the average annual temperature range between 19-21 degrees Celsius.

The road project is composed by two road sections classified as DR 52 connected to NR 3 and DR 48 connected to NR 2.

The project for upgrading of Nyacyonga-Mukoto Road (36Km) is initiated to address the following:

The main Project objectives are:

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• The road capacity deficiencies and to improve road conditions considering the safety of the road users including pedestrian and other non-motorized traffic;
• The promoting of trade, increasing mobility and reducing transport costs by facilitating regional mobility of both goods and people;
• To enhance the connectivity between the City of Kigali and Northern Province specifically in the field of agriculture, mining and tourism.
• The improvement of the junctions' sharp curves along Nyacyonga-Mukoto road;
• The traffic diversion to reduce the traffic congestion in the national road network especially to and from to Northern Province and DRC.

The Nyacyonga-Mukoto road has a length of 36 km with the width varies between 6-7 meters and connect two important national paved roads from northern part of the City of Kigali to Northern Province. It starts in the junction of Kigali-Gatuna (RN 3) with DR 52 in Gasabo District and ends in the junction of Kigali - Musanze Road (NR 2) with DR 48 in Rulindo District. And requires additional land to widen the carriageway to 7.4 meters with 1.5 meter shoulders on both sides and bicycle lanes of 1.5m in the business centers. The works include road furnishings, markings, signage, and lighting to enhance driving safety.

The works execution period is estimated to be Thirty-Six (36) calendar months, in addition to 18 months for Defect Liability Period (DLP).

The Government of Rwanda has received a Loan from the Arab Bank for Economic Development in Africa (BADEA) and the OPEC Fund for International Development (hereinafter referred to as the “Fund”) and intends to use part of the proceeds of the Loan for eligible payments for consulting services for which this ToR is issued.
1.2 Project Location

The Project location is shown in below map.

Nyacyonga-Mukoto section: displayed under green color

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1.3 The Executing Agency of the Project on behalf of the GoR
Rwanda Transport Development Agency (RTDA - the Client).

2. Consulting Services

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 Funders’ and client websites inviting Arab, African and Arab-African Consulting Firms to submit the expression of interest (EOI) together with their qualification's documents. A short list of 6-8 prequalified Consulting Firms will be invited to submit their technical and financial proposals. The JV consultants will submit their technical and financial proposals in separate envelopes. The evaluation (Technical and Financial) in each stage is made in accordance with criteria agreed in advance with the Fund.

The objective of the consulting services is to achieve most efficient/ cost effective implementation through the following tasks:
(1) Review and update the detailed design.
(2) Supervision of road construction works.
(3) Monitoring of implementation of Environmental Management Plan (EMP), Environmental Monitoring Plan (EMoP) and Resettlement Action Plan (RAP).
(4) Inspection and report on road project issues during Defects Liability Period.

2.2 Scope of Consulting Services

2.2.1 Specific technical scope of work
The Consultant shall be fully responsible for the supervision of the construction in accordance with the FIDIC Conditions of Contract.
The Consultant shall also review and update the detailed design and carry out design of any realignment that may be deemed necessary. The Consultant shall, in general, exercise the powers of the Engineer’s Representative in all matters concerning the contract and the execution of the works.
He shall supervise the construction works with due diligence and efficiency and in accordance with sound technical, administrative, financial and economic practices.
He shall perform all duties associated with such tasks to ensure that only the best construction practices are followed and that the final product is in all respects equal to, or better than that specified, at the most economic costs and is carried out in full compliance with the governing specifications.
The scope of the Services shall include all the services necessary to achieve the objectives described in Section 2 above and, in so doing, the Consultant shall expeditiously execute not less than the following tasks.

i) During the contractor's mobilization period, the consultant shall carefully and comprehensively review and update and satisfy himself of the sufficiency of the engineering drawings, plans, technical specifications, design calculations, pertinent reports prepared at design stage - in particular the materials report and sources of materials identified. The consultant as an outcome of his review/update shall, through a design review report, propose to the Employer any amendments deemed necessary to ensure the soundness and sufficiency of the detailed engineering design, contract documents, and accuracy of the bill of quantities. After approval by the Employer the Consultant shall make, any necessary amendment to the design documents. In addition to this, the consultant shall continue review and update of the design, in relation to site conditions, during the whole construction period and timely propose necessary changes to the employer and shall make necessary amendments.

ii) The consultant shall verify the survey of existing utility services, plans and proposals for the relocation of these services if affected by the proposed works, and liaise closely with authorities concerned on the proposed relocation of such services. The consultant shall put up detailed plans and proposals for the relocation of these services if affected by the proposed work. All official dealings with any service agencies shall be done through the Employer.

iii) Liaise with RTDA to ensure that assessment of Compensation and payment in respect to properties within the Right of Way is carried out before the contractor is given possession of site.

iv) Identify all the survey ground control stations (beacons and bench marks), which have been established during design stage; verify the accuracy of the survey stations and instruct and coordinate with the contractor to re-establish (as per section VI Special provision to the standard technical specification of the bidding document) any damaged or missing stations to enable the Contractor to set out and construct the Works.

v) Issue the Contractor with all necessary copies of the Engineering Drawings, Technical Specifications and Contract Documents or timely provide any such supplementary information requested by the Contractor, necessary for the Contractor to carry out the Works. Issue site instructions to the Contractor as required.

vi) With due diligence and efficiency supervise fully the construction of the works which are to be executed in accordance with sound technical administration, financial and economic practices. The consultant shall perform all duties

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associated with such tasks to ensure that only the best construction practice is followed and that the final product is in all respects equal to that specified, at the most economic costs and is executed in full compliance with the specifications.

vii) working practices in all operations and immediately draw attention to any instances where this policy is not followed, directing the contractor to carry out all such works deemed necessary in case of emergency/ affecting the safety of personnel, works and adjacent property. Minimize impediment caused to the flow of traffic and those safe acceptable detours are provided and maintained at all times.

viii) Organize the supervision of the works contract with proper allocation of responsibilities to individual members of the supervision team and supervise their work in order to ensure that it is effectively executed.

ix) Prepare any design changes as may be necessary or advisable to suit field conditions including improvements to alignments during construction or changes required to reduce construction costs, without sacrificing strength or quality of the work. This includes, in particular, potential changes to design of bridge structures as a result of ground investigations carried out by the Contractor at bridge sites. Supervise ground investigations which will be carried out by the Contractor at bridge/ hydraulic structure sites. Prepare Engineer's Instructions (EI) and Variation Orders (VO) as recommended or necessary, complete with the associated measurement and payment instructions. Issue such EI’s and VO’s to the Contractor in writing - whilst advising the Employer of such EI’s and VO’s and of the associated implications. (The Particular Conditions of Contract may require the Employer’s approval and Banks no objection prior to issue of some instructions or variations).

x) Routinely and at not more than quarterly intervals, advise the Employer of the estimated total cost in the different contract currencies to completion of the Works and expected completion time.

xi) Approve the Contractor’s work program, work methodology, staff and plant resourcing, setting out of the Works and preparation for the Works in compliance with approved designs, specification, quality, requirements, time schedule and budget; prior to issuing approval to construct the Works.

xii) For all soils and materials proposed and used by the Contractor in the Works conduct all necessary and advisable inspection, sampling, testing and analysis for compliance with the Technical Specifications at source and in the laboratory and approve or reject the use of the soils or materials proposed for or used in
the Works. Whenever necessary order removal and substitution of unsatisfactory material and workmanship.

xiii) Routinely or as requested by the Contractor, inspect the Works both under construction and completed, for compliance with the Specifications and the agreed method of working, as a basis for payment.

xiv) Formally arrange joint inspections with the Contractor, in the presence of the Employer, of completed sections of the Works for acceptance and/or identification of defects, both at substantial completion and upon the expiry of the defects liability period and issue Handing-over Certificates and Defect Liability Certificate.

xv) Keep and maintain up-to-date detailed Daily Site Diary and detailed records (making them available for inspection by the Employer or his representatives when requested to do so) of all contractual correspondence and data; all work stoppages or delays; accidents on Site; official visitors to Site; weather records; all activities in progress at any time on site showing the start and end time and full details of the resources employed per activity.

xvi) Keep and maintain detailed records (and make available for inspection) of the Contractor’s equipment on Site and its precise date of arrival or removal from Site, its date of manufacture, previous hours worked and condition, the date commissioned to commence work, its availability, and utilization. Establish equipment availability figures for each category of equipment.

xvii) Review the Contractor’s proposed work programs and associated work method statements, resource analysis and requirements in relation to the required rate of progress, and approve or reject the proposals accordingly. Identify any changes or additional resources required. Make sure that the program submitted for the execution of the works shall, in addition to the program for pure construction activities, include an alleviation program for Site staff and Labor in respect of Sexually Transmitted Diseases (STD) including HIV/AIDS.

xviii) Continuously evaluate and monitor the Contractor’s physical and financial progress against work program and his method of working in respect of each and all construction activities and produce a resource analysis against production needs. Advise the Contractor when additional resources or revised methods of working or revised program of the works are required.

xix) Review and familiarize themselves with the Rwanda’s HIV/AIDS policy and strategy, and follow up and report in the monthly reports on how the contractor is implementing the alleviation program for Site staff and labor in respect of Sexually Transmitted Diseases (STD) including HIV/AIDS.
consultation with Rwanda and REMA's responsible environmental office, advise the contractors of new developments and additional needs in respect of the STDs and HIV-AIDS as and when they occur.

xx) **Review the Contractor’s proposed working drawing/plans and associated calculations. Approve or reject the proposals accordingly and identify any changes required.**

xxiii) **Review and check the Contractor’s Payment Applications and, after verifying the accuracy of the measurement and costing calculations and the sufficiency of the supporting documentation, prepare and issue interim payment certificates for processing by the Employer within 7 days of receiving such statement from the Contractor. Advise the Employer on whether liquidated damages are due from the Contractor. Prepare and issue final certificate with transmittal sheet of approval and processing steps from the initiator or contractor (originator) invoice/approval or rejection of supervising consultant/approval or rejection from the executing agency and receipt by Bank with return copy to the initiator or originator and supervising consultant.**

xxiv) **Monitor the payment process and alert the Employer when payment delays accrue to a point when: (a) interest charges will become due and (b) the Employer will be in Default for late payment.**

xxv) **Thoroughly review and analyze all the Contractor’s applications for extensions of time or claims for additional payment and furnish the Employer with the Engineer’s detailed analysis of such applications and recommended rulings and, subject to the Employer’s approval (where necessary), advise the Contractor accordingly.**

xxvi) **Ensure that all materials, tools, plant, equipment, facilities, etc, which have to be handed over to the client after completion of the works are in usable and required standards properly dismantled, packed, stored and maintained until the official handing over to the client. Furthermore, the consultant shall arrange for the handing over of these items to take place as provided in the works contract.**

xxvii) **In the event of adjudication or arbitration, provide the necessary personnel and expertise to advise and assist the Employer in any such process and prepare any further analysis of the Contractors claims submissions as may be necessary to assist the Employer in the presentation of his case.**

xxviii) **Provide on-the-job training to not more than five (5) graduate civil engineers at a time (furnished by the Employer) in the various aspects of construction supervision and application of the Works Contract including, but not limited**
to, training in respect of the various contractual issues which arise. Deploy the
trainees as practicable to supervision tasks on the Works.

xxix) Immediately prior to commencement of works and at 6 monthly intervals
thereafter, and immediately prior to final hand-over/acceptance of the whole
of the Works as complete, the Consultant shall conduct 2 days 24 hour and 5
days 12 hours traffic counts and associated contract road link under
upgrading/improvement, at count/survey station locations agreed with
RTDA. The counts shall use the RTDA standard forms and shall differentiate
between the various vehicle type categories shown on the form. The results
and analysis shall be presented in the Inception Report, the Bi-annual and
Annual Reports, and the Final Report. There is also a need for the consultant
to gather data which will help to measure the outcomes of the project (traffic
accident, transport tariff for selected type of transport buses, Station Wagons,
HIV/AIDS prevalence, employment rate, increased production rate, etc.--)

xxx) Ensure that the contractor organizes HIV/AIDS awareness campaigns by
providing health education to the work force and the local population and
provides condoms. For this aspect of the supervision services, the Consultant
should include an Environmentalist/Social Expert as part of the supervision
team.

xxxi) Take digital color photographs and video camera of progress throughout the
duration of the Contract, keep and maintain an official photographic record
(available for inspection) of monthly progress at set locations and also of any
construction activity of technical or contractual interest at any time. Each
photograph and video camera to be captioned with: reference number, time,
date, precise location, subject, and points of particular note. All digital
negative data should be stored on Flash disk/ CD in a record system, together
with copies of the captions.

xxxii) Submit progress reports, special report (to fully acquaint the client with all
aspects likely to affect the Technical and Financial implementation of the
project), final reports and records, and other hard outputs regarding
construction progress and the status of the Works Contract and the consulting
services contract in accordance with Section 9 herein.

xxxiii) Review, approve and submit two full sets of as-built drawings within two
months of completion of the Works detailing all alignment and level
information, position and sizes of drainage structures, services information
(including photos and video camera), and structural drawings (including type
and positions of reinforcement).

xxxiv) Review and get familiar with the Environmental Procedures Manual of REMA
on environmental aspects and ensure proper implementation of the project as
per guidelines, policies set forth in the aforesaid document. Request the contractor to provide an environmental protection plan with a time frame for actions to be taken. The plan should be submitted to the Employer prior to the commencement of the construction works and be updated, as required, during the construction period. The plans shall confirm (those actions identified in the EIA and in the environmental mitigation plan) or recommend additional mitigation measures.

Monitor the implementation of these plans in collaboration with RTDA environmental Officer in Charge. The potential adverse impacts to be minimized during construction include, but not limited to:

Recommendations made to minimize potential adverse impacts during construction including, but not limited to:

- Minimize water and soil pollution, by directing runoff waters into tailing ponds.
- Alleviate noise vibration and dust by regular wetting of surface.
- Ensure safety during construction by installing the appropriate signs and signals and wearing of safety boots, hats, glasses and ear protectors.
- All borrow pit areas will be reclaimed as much as possible to their original state.
- Minimize the risk of soil erosion by grassing the embankments; stabilize with gabions or stone pitching at bridges and at the inlets and outlets of culverts on sandy soils.
- Long traffic diversion roads shall be avoided so as to minimize the effect of dust on the surrounding Environment. In any case all diversions shall be kept damp or reduce dust.
- Spillage of oil, fuel, and lubricants, shall be avoided. If spilt, they shall be collected and disposed of in such a way as not to adversely affect the natural environment.
- Rock blasting near settlement areas shall be properly coordinated with the relevant officers of the Employer’s Government Authorities in an attempt to minimize levels of noise pollution and community interference.
- Camp sites will be located in an area so as to minimize disruption to local population, fauna and flora and water courses; adequate drainage facilities and treatment of sewerage and waste disposals will be provided. Camp area will be dismantled and rehabilitated once construction is completed.
- Follow up of the tree planting
- Follow up of the road safety awareness campaign.

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The Consultant shall also have full consultation with the Local Authorities during implementation of above mitigation measures. In administering the contract implementation, the consultant is to ensure the minimization of the negative impact of the project to the society of project influence area.

xxxv) The consultant shall establish a quality assurance system to ascertain the desired quality standards at all stages of the service. To this end a quality assurance manual needs to be developed at early stages of the service.

xxxvi) The consultant shall organize monthly tripartite progress review meeting and prepare the minute of meeting and submit it to the Client.

xxxvii) Carry out inspections, prepare a Defects list and draft the “Taking Over Certificate” before commencement of “Defects Liability Period.”

xxxviii) Within one month following final inspection of completed works, agree with the contractor the final measurements of the works, and prepare the final payment certificate for submission to the Employer.

xxxix) 6 months after the provisional handover the consultant shall make the project completion report in which all (but not limited to) economic indicators will be captured as per the feasibility study report of the project.

2.2.2 Defects Liability Period

The Defects Liability Period for 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 sub-sections 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) Inspect the works not later than two months prior to the expiry of Defects Liability Period, with the preparation of a final 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.

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(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 Engineer upon satisfactory completion of works.

(e) Prepare and submit the Final Completion Report.

Time allowed for (b), (c), (d) and (e) is not included in the staff months in the Data sheet and the Consultant shall propose the time needed for this activity.

2.3 Additional responsibilities of the consultant

Under the terms and Conditions of the Civil Works Contracts, the Consultant shall be provided with his own site offices and laboratory facilities, site accommodation, site transport and other site facilities, equipment, utilities and consumables necessary for the complete execution of the services.

It will, however, be the responsibility of the Consultant to supervise provision of the above stated facilities and equipment by the Contractor in accordance with the contract document. Any equipment purchased by the contractor and paid for by the Client shall become the property of the Client upon completion of the contract or whenever it is no longer required for carrying out of services, whichever occurs earlier.

In the event the Consultant needs to attend to official duties off-site in Kigali or elsewhere, office facilities, accommodation, transport, equipment, utilities and consumables, and any other resources deemed necessary off-site for the complete execution of the services, then the cost of provision of such facilities and the related additional staffing shall be detailed in the Consultant’s proposal and be paid as reimbursable.

3. Duration of the services

The duration of the Services is to extend from the effective date of the Civil Works Contract to the end of the Defects Liability Period of the last section of the Works, which is envisaged as a period of approximately Thirty-Six (36) months, and followed by Eighteen (18) months of the Defects Liability Period, subject to final contract completion. Hence in total Fifty-Four (54) months.
If possible, the Consultant may be asked to start the design review one calendar month before the start of works, to allow early review of all construction documents prepared for the project.

During the 18 months Defects Liability Period, when construction of the whole of the Works has been substantially completed, the Consultant shall reduce the construction supervision staff accordingly. Staff mobilization and demobilization plans are to form part of the Consultants technical proposal and related financial proposal. Where sub-sections of the road will be taken-over as work progresses, the final Defects Liability Period will not be for a whole section of the works, depending on how it is specified in Special Specifications of the contract.

4. Duties of the consultant

The Consultant shall carry out the tasks aforementioned with due care and diligence to achieve the objective of the services. In the conduct of the work, the Consultant shall maintain close liaison with the Rwanda Transport Development Agency (RTDA).

The Consultant shall provide competent personnel for the services. The Consultant’s personnel will be managed by a Project Director who shall also act as the principal person of contact between the Consultant and the Employer.

5. The Reporting Requirements

The Consultant shall prepare and submit to the Client the reports and documents and a brief description of the contents of these reports are presented as follows:

(i) **Design Review Report**

The report shall outline the recommendation and appropriate changes if necessary or modification on the design standards, design documents, topographic surveying data with the ground condition, the alignment, environment management plan, specification and quantities (updating) given by the design consultant. The existing design documents will be made available to all Consultants. This report does not include submission of revised designs. The draft design review report shall be submitted within two (2) months of the start of services.

(ii) **Monthly Progress Reports:**

Progress reports shall be prepared using RTDA’s standard report format to detail progress against program in respect of all project elements and hard out
puts. All monthly project correspondences shall be submitted in soft copy
together with monthly progress reports.

The report will cover the activities performed during the reporting period.

*The first progress report shall include*

a) **an inception report.** The report shall outline the Consultant’s initial findings and
confirm the methodology and detailed work program proposed for adoption in
the light of the initial findings, while also identifying constraints and proposed
solutions, together with any action required by RTDA to facilitate the successful
implementation of the service.

b) **a report about Contractor’s Mobilization:**

The Consultant shall report on the following:
- Contractor’s mobilization
- Organization and correspondence
- Lines of communication
- Contractor’s detailed work program
- Proposed resources schedules
- Proposed cash flow
- Plant and equipment schedules
- Format of forms and their use and presentation
- Schedule of site meetings
- Contractor’s obligations
- Contractor Execution Plan
- Any other submitted contractual documentation
- Consultant’s mobilization

A suitable number of color photographs with date imprint should be included
which will illustrate progress and any difficulties encountered on the Site.
These will allow a permanent record of progress.

*Notwithstanding the submission of the monthly progress report stated above,
the consultant is required to send to the client, two days before the end of each
month, a progress summary of the works supported by the s-curve diagram.*

(i) **Quarterly Progress Reports:**

These will be similar to the monthly reports but will be more detailed and
include record photographs. They will be prepared by the Resident Engineer
and give an overview of the progress within the Project.

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A suitable number of color photographs with date imprint should be included which will illustrate progress and any difficulties encountered on the Site. These will allow a permanent record of progress.

This report among other information shall include an update of estimated completion time and project cost estimate, keeping in view of variations, price escalations and contractor’s claim entitlement for additional money. These reports shall extend over the Defects Liability Period.

(ii) Annual Progress Reports:

These reports will summarize the activities performed within a year. The format of this report is similar to that of the monthly report. The annual report shall also include important information of the month of June; thus, no monthly and quarterly reports will be required during the month June and the 4th quarter of any fiscal year.

(iii) Contract Completion Report:

The Contract completion report shall include but not be limited to:
- Executive summary
- Mobilization/Demobilization details
- Description of Project
- Project Implementation
- Financial cost details together with a breakdown of the same, detailing and assessing extra expenditures and cost increases inclusive of the justification for such increases.
- Details of the work executed and of the techniques employed and type, quality, quantities and sources of materials used in the pavement.
- Contract changes and variations
- Contractor’s performance
- Assessment of any complaints and/or claims by the Contractor
- A critical study of important technical problems which may have arisen during the construction
- Comments on Technical Specification and Conditions of Contract
- Construction Records.
- As-built drawings (A3 size reproducible)
- Assessment of counterpart training, if any;
- Gender balance among workers during the contract period
- Conclusions
- Details of Final Account, where possible

(iv) Consultancy Completion Report

This report will be a comprehensive report on the consultancy services throughout the Contract. It will describe the aims of the project and the
achievements of the construction works. It will also give progress on the Final Account, which will be appended. Finally it will give details of the Consultant's visits and activities during the defects liability period.


This manual shall at a minimum describe 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.

(vi) Environmental Management Report

This report will be a comprehensive report on all Environmental and Social impact mitigation measures undertaken by the contractor. It will describe the major environmental elements of the project, adequacy of the mitigation measures proposed during design as well as supervision period and the effectiveness of the measures undertaken during construction. The supervision consultant is also expected to report in his progress report any development with respect to Environmental and Social aspect of the project.

SUMMARY OF REPORTS AND DOCUMENTS TO BE PREPARED

The Consultant shall prepare and submit directly by hand or by courier to the Client the following reports and documents in the numbers stated as per the format that will be provided or discussed by the Client:

<table>
<thead>
<tr>
<th>Types of reports/documents</th>
<th>No of copies of draft reports</th>
<th>Draft report submission date</th>
<th>No of copies of final reports</th>
<th>Final report submission date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Review Report</td>
<td>5</td>
<td>two weeks before the commencement of actual work by the Contractor</td>
<td>7</td>
<td>Within one week of receipt of the Client’s comments</td>
</tr>
<tr>
<td>Monthly Progress Reports</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>Not later than the first week of the following month</td>
</tr>
<tr>
<td>Quarterly Progress Report</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>Not later than the first week of the end of each quarter - Note that Bank copy on its format available at RTDA.</td>
</tr>
<tr>
<td>Annual Progress Reports</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>At the end of each fiscal year of Rwanda (June), after the</td>
</tr>
</tbody>
</table>

Website: https://www.rtda.gov.rw
<table>
<thead>
<tr>
<th></th>
<th>Contract Completion Report</th>
<th></th>
<th>Within two months of the completion of construction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
<td>5</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Consultancy Completion Report</td>
<td>5</td>
<td>Within one month of the end of the defects liability period</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consultant's quality Assurance Manual</td>
<td>5</td>
<td>Within one month of the date of commencement of the consultancy contract</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Management Report</td>
<td>5</td>
<td>Within one month of the completion of construction</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. **KEY PERSONNEL AND SUB CONSULTANTS**

The Consultant shall provide competent personnel for the services, who shall be managed by the Resident Engineer and who will represent the Consultant in performing the services.

All the Consultant's personnel shall be good in the full use (i.e. the writing, reading and speaking) of the contract language, which is **English**. They shall be fully computer literate regarding word processing and spread sheets, with not less than one member of staff fully computer literate in the use of: data bases; total station surveying.

The total staff months for the assignment including the Defects Liability Period is 79. The table below is tentative as anticipated by the Client. The Consultant may propose any additional key staff and different staff months for the key staff based on his understanding of the implementation of the assignment. And which in his opinion are necessary for the performance of the services and indicate the same in the Technical and Financial Proposals. The Consultant may even propose using some staff for more than one task (for instance, the Team Leader could also be the Geotechnical Engineer).

CVs for permanent staff of the Consultant shall be signed by authorized representative while CVs for externally recruited staff shall be signed and recently dated by the proposed key staff. Providing copies of university certificates (translated to English or French) is desirable.

Key staff shall sign the exclusivity form attached in I.4. Only personnel having the minimum required academic qualification will be considered for evaluation. Postgraduate degrees in the related field will be an advantage.

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Personnel whose score is below 60% of the allotted points for their respective criteria, will have to be replaced by a better-qualified one, prior to contract signing.

Since the confirmation of joint and severable liability of the members of a said joint venture is required, Consultants shall make sure that the percentage of shares is reflected in the technical proposal and key staff participation. Joint ventures in which all key staff are from one member of the joint venture will not be considered.

The Consultant’s personnel shall include the following:

Control and supervision of road works

A. Key Personnel

(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 Construction/upgrading/rehabilitation Projects representing any of the three parties in construction contracts out of which seven (7) years is on construction of Asphalt Concrete Road projects.

- He/She must have extensive broad experience in highway design/supervision, works Contract administration and evaluation of Contractors’ claims for at least ten (10) years as Resident Engineer or Team Leader level on a road construction Contract of comparable magnitude. Knowledge of FIDIC Contract procedure is desirable. 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 Ten (10) 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 construction, upgrading or rehabilitation projects representing any of the three parties in road construction/maintenance contracts.

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- He/She must have previous relevant experience on large highway construction Contracts with particular experience in estimation of quantities, writing specifications and Contract administration, and measurement of works. He/She must be familiar with latest highway design computer applications. Knowledge of FIDIC Contract procedures is desirable. Previous experience on road projects in outside Rwanda will be an advantage.

(iii) **Pavement/Material Engineer**
- A minimum of BSc. Degree in Civil Engineering or related field with at least 15 years professional experience and twelve (12) years’ experience on road/bridge projects. He/She must be a member of recognized engineers’ professional organization.
- Experience as a Pavement/Material Engineer on six (6) road design/supervision projects.
- He/She must have a minimum of ten (10) years of experience in road construction materials, geotechnical surveys, testing and pavement design, highway construction, particularly in tropical countries. Previous experience on road projects in Africa will be an advantage.

(iv) **Geotechnical Engineer**
- A minimum of BSc degree in civil engineering or related field and fifteen (15) years’ experience in road/bridge projects.
- Ten (10) years extensive experience in supervision of ground investigation, testing and interpretation of results for the design of structural foundation.
- Five (5) years’ experience as Geotechnical Engineer in road construction projects.
- Relevant experience in Sub Saharan African countries will be an advantage

(v) **Highway Engineer**
- He/She must possess 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.
- He/She must have at least five (5) years of recent experience in geometric design/supervision of roads using the latest highway design computer applications. He/She 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.

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(vi) **Senior Surveyor/Topographical Engineer**

- He/She must possess BSc. Degree in Survey & Photogrammetry or equivalent and with at least ten (10) years professional experience.
- He/She must have served in similar capacity in at least three road projects of similar magnitude and complexity. He/She must familiar with the latest electronic survey equipment including GPS, Total Stations and associated computer applications. Previous experience on road projects in Africa will be an advantage.

(vii) **Environmentalist/Safety Expert**

- A minimum of BSc Degree in Environmental Management or relevant fields with Eight (8) years professional experience. He/She must be registered as Lead Expert (Rwanda Environmental Management Authority) or equivalent.
- He/She must have a minimum of 5 years working experience on environmental/social management with sound knowledge of environmental and social issues, initiatives and implementation of mitigation measures in construction of bridges and road works. Previous work done on highway project would be an added advantage.

(viii) **Claims Expert**

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

**B. SUPPORT STAFF**

In addition to the expert personnel designated above, the Consultant shall determine the support and back-up staff deemed necessary to assist with on-site supervision of the works and design of the Roadside Amenities and determine their needed input (staff/months). Remuneration for all other Support Staff e.g. Inspectors, Material Technologists, Technicians, Survey Assistants and any other expenses required for functioning of the site supervision or backstopping shall be priced using form FIN 3

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and no adjustment can be sought during contract negotiations. CVs for support staff shall be presented during contract negotiations.

<table>
<thead>
<tr>
<th>A. Key Staff</th>
<th>Unit</th>
<th>Estimated input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident Engineer</td>
<td>Staffmonth</td>
<td>37.5</td>
</tr>
<tr>
<td>Assistant Resident Engineer</td>
<td>Staffmonth</td>
<td>36</td>
</tr>
<tr>
<td>Pavement/Material Engineer</td>
<td>Staffmonth</td>
<td>36</td>
</tr>
<tr>
<td>Geotechnical Engineer</td>
<td>Staffmonth</td>
<td>12</td>
</tr>
<tr>
<td>Senior Surveyor / Topographer</td>
<td>Staffmonth</td>
<td>36</td>
</tr>
<tr>
<td>Highway Engineer</td>
<td>Staffmonth</td>
<td>12</td>
</tr>
<tr>
<td>Claims Expert</td>
<td>Staffmonth</td>
<td>3</td>
</tr>
<tr>
<td>Environmentalist</td>
<td>Staffmonth</td>
<td>19.5</td>
</tr>
<tr>
<td><strong>Total Key Staff-months</strong></td>
<td></td>
<td><strong>138</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Technicians, Surveyors, Draftsperson and Secretary</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>laboratory Technician 1</td>
<td>Staffmonth</td>
<td>To be proposed by consultant</td>
</tr>
<tr>
<td>laboratory Technician 2</td>
<td>Staffmonth</td>
<td></td>
</tr>
<tr>
<td>Survey assistant 1</td>
<td>Staffmonth</td>
<td></td>
</tr>
<tr>
<td>Survey Assistant 2</td>
<td>Staffmonth</td>
<td></td>
</tr>
<tr>
<td>Draftsmen</td>
<td>Staffmonth</td>
<td></td>
</tr>
<tr>
<td>Site Inspectors of Works</td>
<td>Staffmonth</td>
<td></td>
</tr>
<tr>
<td>Secretary</td>
<td>Staffmonth</td>
<td></td>
</tr>
<tr>
<td><strong>Total Support</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 construction supervision team will perform.

In addition to the key staff designated above, the consultant shall determine the support and back up 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 surveyors, 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/or and supporting staffs required to accomplish the tasks outlined in the TOR.

(ii) FACILITIES, SERVICES AND RESOURCES TO BE PROVIDED BY CLIENT

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I. RTDA will avail to consultant free of charge all available documents relevant to the project, including the Feasibility Study Report as well as detailed technical report, Environmental Impact Assessment (EIA), Resettlement Action Plan (RAP), Review of Engineering Design Reports, drawings, specifications and cost estimates prepared by the design Consultant.

II. 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.

III. 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.

IV. The client will assign staff (maximum of 4 at with two (2) at one time) to the Consultant for on-the-job training in the various aspects of the Consultant’s duties and may be used by the Consultant as part of its inspectors. The trainees will be paid by the consultant 1000 US Dollars (taxes inclusive). The cost will be included in the consultant financial proposal.

V. Under the construction contract, the consultant shall be provided with office, computers, laboratory, accommodation and equipment, housing for staff and transportation. These facilities are included in the construction contract and detailed in the special specifications and bills of quantities of the Contractor.

VI. For the duration of the Services, the Consultant shall be provided with all site facilities under the Construction Contract. In this line, the Consultant shall be provided with Five vehicles: (i) Four (4) pick-up double cabin (4x4) for the firm and (ii) one pick-up double cabin (4x4) for the Employer’s representative. All according operating/functioning fee, insurance, maintenance, fueling, etc, shall be paid under the contractor’s contract.
However, during the contractor’s mobilization period, the contractor will provide temporary premises to the consultant.

VII. The consultant shall be provided, from the facilities received in accordance with the works contract document, the following facilities for RTDA’s counterpart staff and road safety engineer for the whole duration of service: Accommodation and an office.

8. MONITORING AND EVALUATION

8.1 Definition of indicators

In his Technical Proposal (Organization and Methodology), the Consultant shall propose relevant key indicators for monitoring project progress, results, activities and assumptions and show how these will be monitored.
As a minimum, the Consultant will regularly review the physical work progress in terms of number of km of road construction and completed to various levels in compliance with the drawings and specifications in relation to the Contractor’s approved work program and cash-flow projections, schedule of plant and manpower resources.

The Consultant will regularly appraise this information in his Progress Reports and in Site Meetings and discuss them with the Contractor and Engineer.

8.2 **Reviews and Evaluations**

Project reviews and evaluation applying monitoring indicators will be presented in the regular progress reports and the Final Project Completion Report will contain an overall assessment.

9. **Terms of Payment**

This is a time-based contract. Payments will follow the monthly progress report and the Consultant will invoice the Client based on inputs made in accordance with the agreed schedule of man-months of Consultant’s personnel time inputs at the agreed rates, the itemized schedule of reimbursable expenses, and in accordance with the Terms and Conditions of the Contract Agreement with the Government of Rwanda.

10. **Data, Local Services and Facilities to be Provided by the Client**

(a) One set of all contract documents and design reports.

(b) Liaison and assistance for any information or documents required from other Government Agencies and which RTDA considers essential for the proper conduct and execution of this assignment.

(c) Customs and Tax Exemptions as detailed in Special Conditions of Contract.

Under the construction contract, the consultant shall be provided with office and laboratory accommodation and equipment, housing for staff and transportation. These facilities are included in the construction contract and detailed in the special specifications and bills of quantities.

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