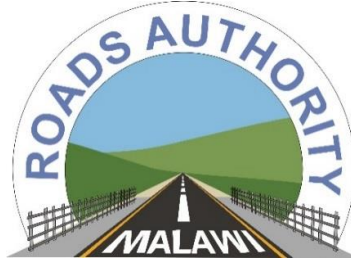


# Government of the Republic of Malawi



*Accelerating Malawi's Economic Growth*

## Roads Authority

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### Request for Proposals Documents

### For the

### Procurement of Consultancy services

### (Lump Sum Contracts)

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### SANTHE – MKHOTA – KAPIRI (D164/D163) ROAD

Subject of Procurement	<b>Consultancy Services for Feasibility Study and Detailed Engineering Design and Construction Supervision for the Upgrading of Santhe – Mkhota – Kapiri (D164/D163) Road in Kasungu and Mchinji Districts</b>
Procurement Reference Number	<b>RA/CON/DEV/CR/KU-MC/UP/2024-25/31</b>
Procurement Method	<b>Request for Proposals</b>
Basis of Selection	<b>Quality and Cost Based Selection</b>
Date of Issue of Request for Proposals Document	<b>27<sup>th</sup> June 2024</b>

The Chief Executive Officer  
The Roads Authority, Functional building, Paul Kagame Road  
Private Bag B346  
Lilongwe 3, **MALAWI**

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# Section 1: Instructions to Bidders

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## Section I. Instructions to Bidders

### A. General

#### 1. Scope of Proposal

- 1.1 The Procuring Entity indicated in the Bid Data Sheet (BDS) invites technical and financial proposals for the consulting services described in Section 6, Terms of Reference. The proposal could form the basis for future negotiations and ultimately a contract between your firm and the Procuring Entity.
- 1.2 The procurement reference number and a brief description of the Assignment and its objectives are given in the BDS.
- 1.3 The Assignment shall be implemented in accordance with the phasing indicated in the Terms of Reference. When the Assignment includes several phases, continuation of services for the next phase shall be subject to satisfactory performance of the previous phase, as determined by the Procuring Entity.

#### 2. Source of Funds

- 2.1 The Procuring Entity has an approved budget from public funds towards the cost of the procurement described in the BDS. The Procuring Entity intends to use these funds to place a contract for which this Request for Proposals is issued.
- 2.2 Payments will be made directly by the Procuring Entity and will be subject in all respects to the terms and conditions of the resulting contract placed by the Procuring Entity.

#### 3. Eligible Bidders

- 3.1 A Bidder shall:
  - (a) have the legal capacity to enter into a contract;
  - (b) not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended and not be the subject of legal proceedings for any of the foregoing; and
  - (c) have fulfilled their obligations to pay taxes according to the tax laws of their country of registration.
- 3.2 In order to demonstrate compliance with the criteria in ITB Sub-Clause 3.1, a Bidder shall submit with its Proposal appropriate documentary evidence demonstrating its compliance.
- 3.3 All bidders (including all members of a joint venture, subconsultants and Personnel) shall have the nationality of an eligible country, as defined in Section 5, Eligible Countries.
- 3.4 Government-owned enterprises in the Republic of Malawi may only participate if they are legally and financially autonomous, operate under commercial law, and are not a dependent agency to the Procuring Entity.
- 3.5 A Bidder that has been debarred from participating in public procurement in accordance with ITB Sub-Clause 5.1(c), at the date of the deadline for proposal submission or thereafter, shall be disqualified.

#### 4. Conflict of Interest

- 4.1 The Government of the Republic of Malawi (hereinafter called "the Government") requires that Consultants provide professional, objective, and impartial advice and at all times hold the Procuring Entity's interests paramount, strictly avoid conflicts with other assignments or their own corporate interests and act without any consideration for future work. Without limitation on the generality of the foregoing, Suppliers, and any of their affiliates, shall be

considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

- (a) A firm that has been engaged by the Procuring Entity to provide goods, works or services other than consulting services for a project, and any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and any of its affiliates, shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation. For the purpose of this paragraph, services other than consulting services are defined as those leading to a measurable physical output, for example surveys, exploratory drilling, aerial photography, and satellite imagery.
  - (b) A Consultant (including its Personnel and Sub-Consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Procuring Entity. For example, a Consultant hired to prepare engineering design for an infrastructure project shall not be engaged to prepare an independent environmental assessment for the same project, and a Consultant assisting a Procuring Entity in the privatization of public assets shall not purchase, nor advise purchasers of, such assets. Similarly, a Consultant hired to prepare Terms of Reference for an assignment should not be hired for the assignment in question.
  - (c) A Consultant (including its Personnel and Sub-Consultants) that has a business or family relationship with a member of the Procuring Entity's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment (iii) a member of the Procuring Entity's Internal Procurement Committee, or (iv) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Government throughout the procurement process and the execution of the Contract.
- 4.2 Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the Procuring Entity, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.
- 4.3 No agency or current employees of the Procuring Entity shall work as a Consultant under their own ministries, departments or agencies. Recruiting former government employees of the Procuring Entity to work for their former ministries, departments or agencies is acceptable provided no conflict of interest exists. Bidders should be aware that existing government employees can only be nominated as personnel in Technical Proposals in accordance with the Government of Malawi's current regulations concerning external employment for government employees.
- 4.4 If a shortlisted Bidder could derive a competitive advantage from having provided consulting services related to the assignment in question, the Procuring Entity shall make available to all shortlisted Bidders together with this RFP all information that would in that respect give such Bidder any competitive advantage over competing Bidders.

## **5. Corrupt or Fraudulent Practices**

- 5.1 The Government requires that Procuring Entities, as well as Bidders and Suppliers under government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Government:
- (a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) "corrupt practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
  - (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
  - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish prices at artificial, noncompetitive levels; and
  - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.
- (b) will reject a recommendation for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question; and
- (c) will debar a Bidder from participation in public procurement for a specified period of time if it at any time determines that the firm has engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a contract.

## **B. Request for Proposals Document**

### **6. Sections of Request for Proposals Document**

- 6.1 The Request for Proposals Document consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB Clause 8.

#### **Part 1 Bidding Procedures**

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation Criteria
- Section 4 Bidding Forms
- Section 5 Eligible Countries

#### **Part 2 Schedule of Requirements**

- Section 6 Terms of Reference

#### **Part 3 Contract**

- Section 7 General Conditions of Contract (GCC)
- Section 8 Special Conditions of Contract (SCC)
- Section 9 Contract Forms

### **7. Clarification of Request for Proposals Document**

- 7.1 Bidders requiring a clarification of the Request for Proposals Document must notify the Procuring Entity, in writing, not later than fourteen (14) days before the proposal submission date. Any request for clarification shall be sent to the Procuring Entity's address indicated in the BDS. The Procuring Entity shall respond in writing to such requests, and copies of the response shall be sent to all invited Bidders.

### **8. Amendment of Request for Proposals Document**

- 8.1 At any time before the submission of proposals, the Procuring Entity may, for any reason, whether at its own initiative or in response to a clarification requested by an invited Bidder, modify the Documents by amendment. The amendment shall be sent in writing to all invited Bidders and will be binding on them. The Procuring Entity may at its discretion extend the deadline for the submission of proposals.

## C. Preparation of Proposals

### 9. Preparation of Proposals

- 9.1 You are requested to submit separate technical and financial proposals.
- 9.2 In preparing the proposal, you are expected to examine all terms and instructions included in the Request for Proposals Document. Failure to provide all requested information shall be at your own risk and may result in rejection of your proposal.
- 9.3 To obtain first-hand information on the Assignment and on the local conditions, bidders are encouraged to pay a visit to the Procuring Entity before submitting a proposal and attend a pre-proposal conference if specified in the BDS. Bidders must fully inform themselves of local conditions and take them into account in preparing their proposal.
- 9.4 The Procuring Entity shall provide the inputs specified in the Terms of Reference, assist the Supplier in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 9.5 Please note that the costs of preparing the proposal and of negotiating the contract, including a visit to the Procuring Entity, are not reimbursable as a direct cost of the Assignment;
- 9.6 Please note that the Procuring Entity is not bound to accept any of the proposals submitted.

### 10. Language of Proposals

- 10.1 The proposal, as well as all correspondence and documents relating to the proposal exchanged by the Bidder and the Procuring Entity, shall be written in English.
- 10.2 Study reports must be in the Language(s) specified in the Terms of Reference. Working knowledge of the national language by the firm's personnel is recommended.

### 11. Joint Ventures, Associations and Subcontracting

- 11.1 If a Bidder considers that it does not have all the expertise for the assignment, it may obtain a full range of expertise by associating with individual consultant(s) or other firms or entities or by sub-contracting as appropriate.
- 11.2 Bidders shall not associate with other Bidders invited for this assignment, unless otherwise specified in the BDS.
- 11.3 International Bidders for large contracts are encouraged to seek the participation of national Consultants by entering into a joint venture with, associating with or subcontracting part of the assignment to national Consultants.
- 11.4 The same subconsultant may be included in several proposals, subject to any limitations in the BDS. Any limits on the percentage of the total proposed contract price which may be subcontracted are stated in the BDS.

### 12. Professional Staff

- 12.1 The estimated number of key professional staff-months required for the Assignment is stated in the BDS. Your proposal should be based on a number of key professional staff-months substantially in accordance with the above number. Alternatively, for fixed-budget assignments, the available budget is given in Section 3, Evaluation Criteria and the Financial Proposal shall not exceed this budget.
- 12.2 It is desirable that the majority of the key professional staff proposed are permanent employees of the Bidder or have an extended and stable working relationship with the Bidder.



12.3 Proposed staff should have experience under conditions similar to those prevailing in the Republic of Malawi.

12.4 No alternative to key professional staff may be proposed, and only one curriculum vitae (CV) may be submitted for each position.

### **13. Contents of Technical Proposals**

13.1 Your technical proposal shall provide the following and any additional information, using the formats included in Section 4, Bidding Forms:

- (a) The Technical Proposal Submission Sheet (Section 4, Form T1);
- (b) A brief description of the Bidder's organisation and an outline of recent experience on assignments of a similar nature. (Section 4, Form T2). For each assignment, the outline should indicate, inter alia, the profiles of the staff provided, duration, contract amount and firm involvement;
- (c) Any comments or suggestions on the Terms of Reference, including the data, services and facilities to be provided by the Procuring Entity (Section 4, Form T3);
- (d) A description of the approach, methodology and work plan that the Bidder proposes to execute the services (Section 4, Form T4);
- (e) The composition of the proposed staff team, the tasks which would be assigned to each (Section 4, Form T5);
- (f) CVs recently signed by the proposed key professional staff or an authorized manager in the home office (Section 4, Form T6). Key information should include number of years with the firm, and degree of responsibility held in various assignments during the last ten (10) years;
- (g) A Staffing Schedule, showing estimates of the total staff input to be provided to carry out the Assignment (Section 4, Form T7), supported by bar chart diagrams showing the time proposed for each professional staff member;
- (h) A Work Schedule, showing the timing proposed for each activity, which must be consistent with the methodology and workplan described in the proposal (Section 4, Form T8); and
- (i) Any additional information requested in the BDS.

13.2 The technical proposal shall not include any financial information.

### **14. Contents of Financial Proposals**

14.1 The financial proposal shall list all costs associated with the assignment, using the following standard forms contained in Section 4, Bidding Forms:

- (a) Financial Proposal Submission Sheet (Section 4, Form F1);
- (b) Summary of Proposal (or Activity ) Price (Section 4, Form F2);
- (c) Summary of Fees (Section 4, Form F3);
- (d) Summary of Reimbursables (Section 4, Form F4); and
- (e) Any additional information requested in the BDS.

14.2 The total proposal price shall be broken down into the following cost components using the appropriate forms:

- (a) Fees for staff, indicating rates for home and field work, where appropriate; and
- (b) Reimbursable expenditure, such as subsistence, transportation (international and local for mobilisation and demobilisation), services and equipment (vehicles, office equipment, furniture, and supplies), printing of documents, surveys etc.

- 14.3 Where indicated in the BDS, the total proposal price shall be broken down into separate activities and forms F2 to F4 shall be completed for each activity.
- 14.4 The financial proposal should clearly estimate, as a separate amount, the local taxes (including social security), duties, fees, levies, and other charges imposed on the Consultant and their personnel (other than nationals of or permanent residents in the Republic of Malawi), unless the BDS specifies otherwise.
- 14.5 The completed financial proposal forms, adjusted if necessary during evaluation or negotiation, will be used in any resulting Agreement, to compile the: breakdown of Contract Price in the case of a Lump Sum contract, which will be used only to determine prices for any additional Services or costs;
- 14.6 Where commissions and gratuities have or shall be paid by the Bidder in relation to the assignment these shall be listed in the Financial Proposal Submission Sheet.

### **15. Currencies of Proposal**

- 15.1 Bidders may express the price of their services in Malawi Kwacha or any freely convertible currency, unless otherwise indicated in the BDS. Bidders may not use more than three currencies. The Procuring Entity may require Bidders to state the portion of their price representing local cost in Malawia Kwacha, if so indicated in the BDS.

## **D. Submission and Opening of Proposals**

### **16. Submission of Proposal**

- 16.1 Bidders shall submit one original technical proposal and one original financial proposal and the number of copies of each indicated in the BDS. Each proposal shall be in a separate envelope indicating original or copy, as appropriate. All technical proposals shall be placed in an envelope clearly marked "Technical Proposal," and the financial proposals in one marked "Financial Proposal." The envelope containing the financial proposal shall also bear a warning "DO NOT OPEN WITH THE TECHNICAL PROPOSAL". These two envelopes, in turn, shall be sealed in an outer envelope bearing the address and information indicated in the BDS. The envelope shall be clearly marked: "DO NOT OPEN, EXCEPT IN PRESENCE OF THE INTERNAL PROCUREMENT COMMITTEE."
- 16.2 In the event of any discrepancy between the copies of the proposals, the original shall govern. The original and each copy of the technical and financial proposal shall be prepared in indelible ink and shall be signed by the authorized Supplier's representative. The representative's authorization shall be confirmed by a written power of attorney accompanying the proposals, unless otherwise indicated in the BDS. All pages of the technical proposal shall be initialed by the person or persons signing the proposal.
- 16.3 The proposal shall contain no interlineation or overwriting except as necessary to correct errors made by the Bidders themselves. Any such corrections shall be initialed by the person or persons signing the proposal.
- 16.4 The completed technical and financial proposals shall be delivered on or before the time and date stated in the BDS to the address indicated in ITB Sub-Clause 16.1. The Procuring Entity shall not consider any proposal that arrives after the deadline for submission of proposal. Any proposal received by the Procuring Entity after the deadline for submission of proposals shall be declared late, rejected, and returned unopened to the Bidder.

### **17. Validity of Proposal**

- 17.1 The proposals shall be valid for the number of days stated in the BDS from the date of the deadline for submission. During this period, Bidders shall keep available the professional

staff proposed for the assignment. The Procuring Entity shall make its best effort to complete negotiations within this period.

### **18. Withdrawal, Substitution and Modification of Proposals**

18.1 A Bidder may withdraw, substitute, or modify its proposal after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 16.2. The corresponding substitution or modification of the proposal must accompany the respective written notice. All notices must be:

- (a) Submitted in accordance with ITB Clause 16 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "Withdrawal," "Substitution," or "Modification;" and
- (b) Received by the Procuring Entity prior to the deadline prescribed for submission of proposals, in accordance with ITB Sub-Clause 16.5.

18.2 Proposals requested to be withdrawn in accordance with ITB Sub-Clause 18.1 shall be returned unopened to the Bidders.

18.3 No proposal may be withdrawn, substituted, or modified in the interval between the deadline for submission of proposals and expiry of the period of proposal validity specified by the Bidder on the Technical Proposal Submission Sheet or any extension thereof.

### **19. Proposal Opening**

19.1 The Procuring Entity shall conduct the proposal opening in the presence of Bidders' designated representatives who choose to attend, and at the address, date and time specified in the BDS.

19.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding proposal shall not be opened, but returned to the Bidder. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding proposal being substituted, and the substituted proposal shall not be opened, but returned to the Bidder. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding proposal. No proposal withdrawal, substitution or modification shall be permitted unless the corresponding notice contains a valid authorization to request the withdrawal, substitution or modification and is read out at proposal opening. Only envelopes that are opened and read out at proposal opening shall be considered further.

19.3 All other outer envelopes shall be opened one at a time, the technical proposals within them opened, reading out: the name of the Bidder and any other details as the Procuring Entity may consider appropriate.

19.4 No proposal shall be rejected at proposal opening except for late proposals, in accordance with ITB Sub-Clause 16.4. Only proposals that are opened and read out at the proposal opening shall be considered further.

19.5 The financial proposals shall remain sealed until the time and date notified for the opening of the financial proposals. Evaluators of technical proposals shall have no access to the financial proposals until the technical evaluation is concluded and the result established.

19.6 The Procuring Entity shall prepare a record of the proposal opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders, who formally request a copy.

## E. Evaluation of Proposals

### 20. Confidentiality

- 20.1 Information relating to the examination, evaluation and comparison of proposals, and recommendation for contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
- 20.2 Any effort by a Bidder to influence the Procuring Entity in the examination, evaluation and comparison of the proposals or Contract award decisions shall result in the rejection of its proposal.

### 21. Clarification of Proposals

- 21.1 To assist in the examination, evaluation and comparison of the proposals, the Procuring Entity may, at its discretion, ask any Bidder for a clarification of its proposal. Any clarification submitted by a Bidder in respect to its proposal, that is not in response to a request by the Procuring Entity, shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change in the prices or substance of the proposal shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the financial evaluation of the proposals, in accordance with ITB Clause 27.

### 22. Responsiveness of Proposals

- 22.1 The Procuring Entity's determination of a proposal's responsiveness is to be based on the contents of the proposal itself.
- 22.2 A substantially responsive proposal is one that conforms to all the terms, conditions, and requirements of the Request for Proposals without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
- (a) affects in any substantial way the scope, quality, or performance of the Consultancy Services specified in the Contract; or
  - (b) limits in any substantial way, inconsistent with the Request for Proposals, the Procuring Entity's rights or the Supplier's obligations under the Contract; or
  - (c) if rectified would unfairly affect the competitive position of other Bidders presenting substantially responsive proposals.
- 22.3 If a proposal is not substantially responsive to the Request for Proposals, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

### 23. Nonconformities, Errors and Omissions

- 23.1 Provided that a proposal is substantially responsive, the Procuring Entity may waive any non-conformities or omissions in the proposal that do not constitute a material deviation.
- 23.2 Provided that a proposal is substantially responsive, the Procuring Entity may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the proposal related to documentation requirements. Such omission shall not be related to any aspect of the price of the proposal. Failure of the Bidder to comply with the request may result in the rejection of its proposal.

### 24. Preliminary Examination of Proposals

- 24.1 The Procuring Entity shall examine the proposals to confirm that:

- (a) the Bidder meets the eligibility criteria defined in ITB Clause 3;
- (b) the proposal has been properly signed;
- (c) all documents and information requested in ITB Clause 13 have been provided; and
- (d) the proposal is substantially responsive to the requirements of the RFP document.

24.2 The Procuring Entity shall confirm that the following documents and information have been provided:

- (a) Technical Proposal Submission Sheet, including a brief description of the services offered and the proposal validity period;
- (b) Separately sealed financial proposal;
- (c) Written confirmation of authorization to commit the Bidder;
- (d) Any other documentation as may be required by the Procuring Entity

24.3 If the proposal fails to meet the criteria specified in ITB Sub-Clause 24.1, it shall be rejected.

## **25. Technical Evaluation of Proposals**

25.1 The Procuring Entity shall technically evaluate the proposals on the basis of the Bidder's responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria and maximum points specified in Section 3. Each responsive proposal will be given a technical score. A proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve any minimum technical score indicated in Section 3.

25.2 The proposals proceeding to the financial evaluation shall be determined in accordance with the methodology and criteria specified in Section 3.

## **26. Financial Proposal Opening**

26.1 After the technical evaluation is completed, the Procuring Entity shall notify those Bidders whose proposals will not pass to the financial evaluation, indicating that their financial proposals will be returned unopened after completing the evaluation process. The Procuring Entity shall simultaneously notify the Bidder(s) whose proposals will proceed to the financial evaluation indicating the date and time set for opening the financial proposal(s). The opening date shall not be sooner than one week after the notification date. The notification will be sent in writing.

26.2 The financial proposal(s) shall be opened in the presence of the Bidders' representatives who choose to attend. The name of the Bidder, the technical quality score and the proposal price(s) shall be read aloud and recorded when the financial proposal(s) are opened. The Procuring Entity shall prepare minutes of the public opening.

## **27. Financial Evaluation of Proposals**

27.1 The Procuring Entity shall financially evaluate each proposal that has been opened as stated in ITB Clauses 26.1 and 26.2 above.

27.2 The Procuring Entity will determine whether the financial proposals are complete. In the case of lump sum contracts, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

27.3 The Procuring Entity will correct any arithmetical errors on the following basis:

- (a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an

obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;

- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

If the Bidder that submitted the best evaluated proposal does not accept the correction of errors, its proposal shall be disqualified.

- 27.4 Where an activity or line item is quantified in the Financial Proposal differently from the Technical Proposal no corrections shall be applied to the Financial Proposal in this respect.
- 27.5 The Procuring Entity shall convert all proposal prices expressed in various currencies into the single currency specified in the BDS, using the official selling exchange rate established by the source 14 calendar days prior to the date of submission of the proposals, as specified in the BDS.
- 27.6 The evaluation shall include those taxes, duties, fees, levies, and other charges imposed under the applicable law; and to be applied to foreign and non-permanent resident consultants (and to be paid under the contract, unless the consultant is exempted), and estimated in accordance with ITB Sub-Clause. 14.3, unless otherwise indicated in the BDS.

## **28. Comparison of Proposals**

- 28.1 The Procuring Entity shall compare all substantially responsive proposals to determine the best evaluated proposal, in accordance with the methodology specified in Section 3, Evaluation Criteria.

## **29. Negotiations**

- 29.1 Prior to the expiry of proposal validity, the Procuring Entity shall notify the successful bidder in writing and invite it to negotiate the Contract at the location indicated in the BDS.
- 29.2 The aim is to reach agreement on all points and initial a draft contract by the conclusion of negotiations.
- 29.3 Negotiations shall commence with a discussion of the technical proposal, including the proposed methodology, work plan, staffing and any suggestions to improve the TOR. Agreement shall then be reached on the final TOR, the staffing, and the staffing and work schedules, which shall indicate activities, staff, periods in the field and in the home office, staff months, logistics and reporting. Special attention shall be paid to optimizing the required outputs from the Supplier within the available budget and to defining clearly the inputs required from the Procuring Entity to ensure satisfactory implementation of the Assignment.
- 29.4 Changes agreed upon shall then be reflected in the financial proposal, using proposed unit rates. The fee rates will not be subject to negotiation, except in the case of Quality Based Selection.
- 29.5 Having selected the lowest evaluated proposal on the basis of, among other things, an evaluation of proposed key professional staff, the Procuring Entity expects to negotiate a contract on the basis of the staff named in the proposal. Prior to contract negotiations, the Procuring Entity shall require assurances that the staff members will be actually available. The Procuring Entity shall not consider substitutions during contract negotiations except in

cases of unexpected delays in the starting date or incapacity of key professional staff for reasons of health.

- 29.6 The negotiations shall be concluded with a review of the draft form of the contract. The Procuring Entity and the Bidder shall finalise the contract to conclude negotiations. If negotiations fail, the Procuring Entity shall invite the next ranked Bidder to Contract negotiations.

## **F. Award of Contract**

### **30. Award of Contract**

- 30.1 The Procuring Entity shall award the Contract to the Bidder whose proposal has been determined to be the best evaluated proposal and is substantially responsive to the Request for Proposals, subject to satisfactory negotiations and provided that such Bidder has been determined to be eligible in accordance with the provisions of Clause 3.
- 30.2 Notwithstanding ITB Sub-Clause 30.1, the Procuring Entity reserves the right to accept or reject any proposal, and to cancel the procurement process and reject all proposals, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Procuring Entity's action.
- 30.3 The Bidder whose proposal has been accepted will be notified of the award in writing by the Procuring Entity prior to expiration of the proposal validity period. Following contract award, the Procuring Entity shall promptly inform the other Bidders that their proposals have not been selected.
- 30.4 The Procuring Entity shall publish in the Malawi Government Gazette the results of the award of contract, as required by the Public Procurement and Disposal of Public Assets Act 2017.

## **Part I - Section 2 Bid Data Sheet**



## Section 2. Bid Data Sheet

Instructions to Bidders (ITB) reference	Data relevant to ITB
<b>A. General</b>	
ITB 1.1	The Procuring Entity is: <b>ROADS AUTHORITY</b>
ITB 1.2	The procurement reference number is: <b>RA/CON/DEV/CR/KU-MC/UP/2024-25/31</b>
ITB 2.1	The assignment is: <b>Consultancy Services for the Feasibility Study and Detailed Engineering Design and Construction Supervision for the Upgrading of Santhe – Mkhota – Matutu – Kapiri (D164/S115/S116) Road in Kasungu and Mchinji Districts</b>
<b>B. Request for Proposals Document</b>	
ITB 7.1	For <b><u>clarification purposes</u></b> only, the Procuring Entity's address is:  <p style="text-align: center;"><b>The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3</b></p> <p style="text-align: center;"><b>Att: Procurement Specialist E-mail: <a href="mailto:ipc@ra.org.mw">ipc@ra.org.mw</a></b></p>
<b>C. Preparation of Proposals</b>	
ITB 9.3	A pre-proposal meeting <b><u>shall not</u></b> be held Date: Time (local time): Venue:
ITB 10.2	The reports must be in <b><u>English</u></b> .
ITB 11.2	International Bidders shall be required to meet the following National Construction Industry Council (NCIC) regulations: <ul style="list-style-type: none"> <li>a. Practice of Construction Services by Foreign Consulting Firms Regulations 2004.</li> <li>b. Subcontracting and Joint Ventures by Foreign and Malawian Construction Firms order 2014.</li> </ul>

Instructions to Bidders (ITB) reference	Data relevant to ITB
ITB 11.4	Limits on subcontracting are: <b>45%</b>
ITB 12.1	<p>The estimated number of key professional staff-months shall be</p> <p><b>Phase 1 and 2</b></p> <p>a) First 10km section 11.5 Staff Months b) The rest of the road section 37.5 Staff-months</p> <p><b>Phase 3, 250 staff months</b></p>
ITB 13.1 (i)	<p>The technical proposal shall include the following additional information:</p> <p><u><b>Current commitments of firm, current commitments of proposed staff</b></u></p> <hr/>
ITB 14.1 (e)	<p>The financial proposal shall include the following additional information:</p> <p><u><b>Build-up of remuneration rates (eg basic salary, housing allowance, social charges etc)</b></u></p>
ITB 14.3	The total proposal price <u>shall</u> be broken down into separate activities.
ITB 14.4	<u><b>Only VAT on fees shall be indicated as separate amount</b></u>
ITB 15.1	<u><b>All bid rates and amounts shall be in Malawi Kwacha</b></u>
<b>D. Submission and Opening of Proposals</b>	
ITB 16.1	In addition to the original of the proposal, the number of copies is: <b>Four (4)</b>
ITB 16.1	<p>The <u><b>address for proposal submission</b></u> is:</p> <p style="text-align: center;"><b>The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3, MALAWI</b></p> <p>In addition to the address, the outer envelope shall bear the following information:</p> <p>(a) the procurement reference number; (b) the title of the assignment; (c) the name and address of the Bidder; and (d) The date and time for opening of proposals.</p>
ITB 16.4	<p>The deadline for proposal submission is:</p> <p>Date: <u><b>25th July 2024</b></u></p>

Instructions to Bidders (ITB) reference	Data relevant to ITB
	Time (local time): <u>10:00 hours</u>
ITB 17.1	The proposal validity period shall be <u>One Hundred and Twenty (120)</u> days.
ITB 19.1	<p>For <b><u>proposal opening purposes</u></b> only, the Procuring Entity's address is:</p> <p style="text-align: center;"><b>The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3, MALAWI</b></p> <p>The time for proposal opening is: Date: <u>25th July 2024</u> Time (local time): <u>10:00 hours</u></p>
<b>E. Evaluation of Proposals</b>	
ITB 27.5	<p>The currency that shall be used for proposal evaluation and comparison purposes to convert all proposal prices expressed in various currencies into a single currency is: <b><u>Not applicable</u></b></p> <p>The source of exchange rate shall be: <b><u>Not applicable</u></b></p>
ITB 27.6	The evaluation shall include all taxes, duties, fees, levies and other charges.
ITB 29.1	<p>For <b><u>negotiations purposes</u></b> only, the Procuring Entity's address is:</p> <p style="text-align: center;"><b>The Chief Executive Officer Roads Authority Functional Building Off Paul Kagame Road Private Bag B346 Lilongwe 3, MALAWI</b></p>

## **Part I - Section 3 Evaluation Criteria**

### **Section 3. Evaluation Criteria**

This section, read in conjunction with Section 1, Instructions to Bidders and Section 2, Bid Data Sheet, contains all the factors, methods and criteria that the Procuring Entity shall use to evaluate a proposal and determine the best evaluated proposal. No other factors, methods or criteria shall be used.

#### **1. Evaluation Methodology**

The methodology for the evaluation of proposals will be **Quality and Cost Based Selection**.

#### **2. Administrative Responsiveness Criteria**

The administrative responsiveness shall be carried out prior to the technical evaluation. The administrative responsiveness check shall be based on the checklist provided in the table below. Bidders shall be required to meet **all** the administrative responsiveness requirements to be eligible for further evaluation.

S/N	ADMINISTRATIVE COMPLIANCE CHECK LIST (Does the proposal comply with RFP requirements?)						
1	One Proposal per firm in English only						
2	One (1) original, (4) copies						
3	Letter of incorporation, or other such document indicating legal status, as well as any other document showing that it intends to associate.						
4	Bid Validity in accordance with RFP.						
5	Power of Attorney on behalf of the Consultant and its associates;						
6	Form TECH 1 - Submission Form						
7	Form TECH 2 – Consultant’s Organization and Experience.						
8	Form TECH 3 - Comments on the TORS						
9	Form TECH 4 – Description of the Approach, Methodology, and Work Plan						
10	Form TECH 5- Team Composition, Key Experts Inputs,						
11	Form TECH 6- Curriculum Vitae (CV) (ITB13.1 (f))						
12	Form TECH 7- Staffing Schedule						
13	Form TECH 8- Work Schedule						
14	All pages initialed by the authorized person						
	<b>Substantially Compliant : Yes/No</b>						

### 3. Technical Evaluation Criteria

The technical criteria and maximum number of points to be given under each are:

Criteria	Maximum Points
(a) Specific experience of the bidder related to the assignment (A Minimum of five (5) projects of similar nature and complexity)	10
(b) Adequacy of the proposed work plan and methodology	25
(c) Qualifications and competence of the key staff for the Assignment	60
(d) Participation of Nationals (as reflected by nationals among key staff)	5
<b>Total Points</b>	<b>100</b>

Criteria, sub-criteria, and point system for the evaluation of the Full Technical Proposals:Points

(i)	Specific experience of the Consultant (as a firm) relevant to the Assignment:	10
(ii)	Adequacy and quality of the proposed methodology, and work plan in responding to the Terms of Reference (TORs):	25
	a) Technical approach and methodology	12
	b) Work plan	8
	c) Organization and staffing	5
	<b>Total points for criterion (ii):</b>	<b>25</b>
(iii)	Key Experts' qualifications and competence for the Design Phase	60
	a) <b>K-1: Team Leader/Highway Design Engineer/Resident Engineer</b>	<b>14</b>
	General Qualifications	4.0
	Adequacy for the assignment - Years	4.0
	Adequacy for the assignment - Specific	4.0
	Experience in the region and language	2.0
	b) <b>K-2: Materials/Pavement Engineer</b>	<b>8</b>
	General Qualifications	2.4
	Adequacy for the assignment - Years	2.4
	Adequacy for the assignment - Specific	2.4
	Experience in the region and language	0.8
	c) <b>K-3: Bridge/Structural Engineer/Measurement Engineer</b>	<b>8</b>
	General Qualifications	2.4
	Adequacy for the assignment - Years	2.4
	Adequacy for the assignment - Specific	2.4
	Experience in the region and language	0.8
	d) <b>K-4: Hydrologist</b>	<b>6</b>
	General Qualifications	1.8
	Adequacy for the assignment - Years	1.8
	Adequacy for the assignment - Specific	1.8
	Experience in the region and language	0.6
	e) <b>K-4: Contract Document Specialist</b>	<b>6</b>
	General Qualifications	1.8
	Adequacy for the assignment - Years	1.8
	Adequacy for the assignment - Specific	1.8
	Experience in the region and language	0.6
	f) <b>K-5: Transport Economist</b>	<b>6</b>
	General Qualifications	1.8
	Adequacy for the assignment - Years	1.8
	Adequacy for the assignment - Specific	1.8
	Experience in the region and language	0.6

	<b>g) K-5: Environmental and Social Expert</b>		<b>6</b>
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
	<b>h) K-5: Engineering Surveyor</b>		<b>6</b>
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
	<b>Total Points for Criteria (iii)</b>		<b>60</b>
<b>(iv)</b>	<b>Key Experts' qualifications and competence for the Supervision Phase</b>		<b>60</b>
	<b>a) K-1: Resident Engineer</b>		<b>14</b>
	General Qualifications	4.0	
	Adequacy for the assignment - Years	4.0	
	Adequacy for the assignment - Specific	4.0	
	Experience in the region and language	2.0	
	<b>b) K-2: Materials Engineer</b>		<b>8</b>
	General Qualifications	2.4	
	Adequacy for the assignment - Years	2.4	
	Adequacy for the assignment - Specific	2.4	
	Experience in the region and language	0.8	
	<b>c) K-3: Measurement Engineer</b>		<b>8</b>
	General Qualifications	2.4	
	Adequacy for the assignment - Years	2.4	
	Adequacy for the assignment - Specific	2.4	
	Experience in the region and language	0.8	
	<b>d) K-5: Transport Economist</b>		<b>6</b>
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
	<b>e) K-5: Environmental and Social Expert</b>		<b>6</b>
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
	<b>f) K-5: Engineering Surveyor</b>		<b>6</b>
	General Qualifications	1.8	
	Adequacy for the assignment - Years	1.8	
	Adequacy for the assignment - Specific	1.8	
	Experience in the region and language	0.6	
	<b>Total Points for Criteria (iii)</b>		<b>60</b>

**The number of points to be given under each evaluation sub-criteria for (c) qualifications and competence of the key staff for the assignment are:**



Criteria	Maximum Points
(a) General qualifications	30
(b) Adequacy for the assignment (The maximum points of 60 to be split as follows: Number of years in the specific field (maximum of 30 points) and number of projects carried out during the period (maximum of 30 points)	60
(c) Experience in the region and language	10
<b>Total Points</b>	<b>100</b>

The proposals proceeding to the financial evaluation shall be:

*{For Quality & Cost Based Selection(QCBS), and Least Cost Selection}*

All proposals reaching the minimum technical score of: 75%

*{For Quality Based Selection(QBS)}*

The proposal achieving the highest technical score only.

#### 4. Financial Evaluation and Comparison of Proposals

Proposals will be compared using the following methodology to determine the best evaluated proposal:

*{For QCBS only}*

To determine financial scores for each proposal, the lowest priced proposal shall be given a financial score of 100, and other proposals shall be given a score proportionate to this, by application of the following formula:

$$S_f = 100 \times F_m / F \quad \text{in which:}$$

**$S_f$**  denotes the financial score of the proposal under consideration;

**$F_m$**  is the price of the lowest price proposal that passed the technical evaluation;

**$F$**  denotes the price of the proposal under consideration.

A total score (S) will be determined for each proposal, by combining its technical (St) and financial (Sf) scores using the following formula and weightings:

$$S = (S_t \times T\%) + (S_f \times P\%)$$

The weights given to the scores of the Technical and Financial Proposals are:

$$T = [80]$$

$$P = [20]$$

Proposals will be ranked and the proposal achieving the highest total score will be recommended for contract award, subject to satisfactory negotiations.

## **Part I - Section 4    Bidding Forms**

## Section 4 Bidding Forms

### List of Forms

#### Technical Proposal – Standard Forms

- T1 Technical Proposal Submission Sheet.
- T2 Bidder's Organisation and Experience.
- T3 Comments and Suggestions on the Terms of Reference.
- T4 Description of the Approach, Methodology and Work Plan for performing the Assignment.
- T5 Team Composition and Task Assignments.
- T6 Curriculum Vitae for Proposed Professional Staff.
- T7 Staffing Schedule.
- T8 Work Schedule.

#### Financial Proposal - Standard Forms

- F1 Financial Proposal Submission Sheet.
- F2 Summary of Proposal (or Activity) Price.
- F3 Summary of Fees.
- F4 Summary of Reimbursables.

*Note to Bidders: This Technical Proposal Submission Sheet should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder. It should be included by the Bidder in its technical proposal.*

## T1 Technical Proposal Submission Sheet

Date: **[insert date (as day, month and year) of proposal submission]**

Procurement Reference No: **[RA/CON/DEV/CR/KU-MC/UP/2024-2025/31]**

To: **[insert complete name of Procuring Entity]**

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Request for Proposals, including Addenda No.: **[insert the number and issuing date of each Addenda]**;
- (b) We offer to provide the consulting services for **[insert a brief description of the Services]** in conformity with your Request for Proposals and our proposal;
- (c) We hereby submit our proposal which includes this technical proposal, and a financial proposal sealed under a separate envelope;
- (d) Our proposal shall be valid for a period of **[specify the number of calendar days]** days from the date fixed for the proposal submission deadline in accordance with the Request for Proposals, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (e) We, including any associates, Joint Venture partners or Subconsultants for any part of the contract, have nationals from eligible countries **[insert the nationality of the Bidder, including that of all parties that comprise the Bidder, if the Bidder is a Joint Venture, consortium or association, and the nationality of each subcontractor]**;
- (f) We do not have any conflict of interest as defined in ITB Clause 4;
- (g) We, our affiliates or subsidiaries – including any sub-consultants for any part of the assignment - are not suspended, or excluded from participation in any public procurement exercise by the Office of the Director of Public Procurement in Malawi in accordance with ITB Sub-Clause 5.1(c);
- (h) We are not under investigation by the Anti Corruption Bureau or any other law enforcement body in Malawi relating to participation in any public procurement tender exercise or execution of any public procurement contract relating to the purchase of goods, works and services by any Procuring Entity.
- (i) The names and physical addresses of the Directors of our firm are provided in the table below or we enclose a copy of our latest Audited Accounts (issued within the last twenty-four (24) months):

Name	Address


- (j) Our Proposal is binding upon us, subject to modifications agreed during any contract negotiations, and we undertake to negotiate on the basis of the staff proposed in our proposal;
- (k) We understand that this proposal, together with your written acceptance thereof, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (l) We understand that you are not bound to accept any proposal that you may receive;

Name: **[insert complete name of person signing the proposal]**

In the capacity of **[insert legal capacity of person signing the proposal]**

Signed: **[signature of person whose name and capacity are shown above]**

Duly authorised to sign the proposal for and on behalf of: **[insert complete name of Bidder]**

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ **[insert date of signing]**

*Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.*

## T2 Bidder's Organisation and Experience

### Bidder's Organisation

[Provide a brief (approximately two pages) description of your firm/entity (and each associate for the assignment) – background, organisation etc.]

### Bidder's Experience

[Using the format below, provide information on relevant assignments carried out in the last five years which best illustrate your experience, where your firm/entity (and each associate for the assignment) provided services similar to the ones requested under this assignment. Please provide the name and contact details of the officer responsible for management by the client for each assignment.]

Assignment Name:	Approx. value of the contract (in current US\$)
Country: Location within Country:	Duration of assignment (months):
Name of Client:	Total N <sup>o</sup> of staff-months <sup>1</sup> :
Contact Name	Contact Details
Address:	Approx. value of the services provided by your firm (in current US\$)
Start Date (Month/Year):	Completion Date (Month/Year):
Name of Associated Consultants, If Any:	N <sup>o</sup> of professional staff-months provided by associated Consultants:
Names of Senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:	
Narrative Description of Project:	
Description of Actual Services Provided by Your Staff:	

Bidder's Name: \_\_\_\_\_

**Note:** A completion certificate from the Client is required to back up each completed service, or a notice of acceptance letter and latest Invoice from Client for Services in progress above 70% completion.

<sup>1</sup> The minimum staff months to meet the minimum criteria shall be the staff months stated in ITB 12.1

*Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal. If none, include form and state "None".*

### **T3 Comments and Suggestions on the Terms of Reference (including the data, services and facilities to be provided by the Procuring Entity)**

**[Give any comments, suggestions or proposed improvements to the terms of reference e.g. deleting unnecessary activities, proposing additional activities, proposing different phasing etc. Any comments should be incorporated in your proposal.**

**Also give any comments on the data, services and facilities to be provided by the Procuring Entity e.g. administrative support, office space, local transportation, equipment, data, counterpart staff etc.]**

*Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.*

## **T4 Description of Approach, Methodology and Work Plan for performing the Assignment**

[It is suggested that you present your Technical Proposal divided into the following three chapters:

- a) **Technical Approach and Methodology,**
- b) **Work Plan, and**
- c) **Organisation and Staffing,**

a) **Technical Approach and Methodology.** In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) **Work Plan.** In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Procuring Entity), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form T8.

c) **Organisation and Staffing.** In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

**It is recommended that the approach, methodology and work plan, inclusive of charts and diagrams, should be no more than 50 pages.]**



*Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.*

**T5 Team Composition and Task Assignments**

<b>Professional Staff</b>				
<b>Name</b>	<b>FIRM</b>	<b>Area of Expertise</b>	<b>Position</b>	<b>Tasks Assigned</b>

*Note to Bidders: The information requested is required in the format provided below for each named member of professional staff and should be included by the Bidder in its technical proposal.*

## **T6 Curriculum Vitae for Proposed Professional Staff**

**1. Proposed Position:** *[only one candidate for each position]* \_\_\_\_\_

**2. Name of Firm:** \_\_\_\_\_

**3. Name of Staff:** \_\_\_\_\_

**4. Date of Birth:** \_\_\_\_\_ **Nationality:** \_\_\_\_\_

**5. Education:** *[indicate college/university and other specialised education, giving names of institutions, degrees obtained and dates of obtained][\*Include copies of all certificates mentioned in the Curriculum Vitae]*

**6. Membership of Professional Associations:** *[\*Include copies of membership certificates]* \_\_\_\_\_

**7. Other Training:** *[indicate other significant training not included under Education]* \_\_\_\_\_

**8. Countries of Work Experience:** *[list countries of work experience in the last ten years]*

**9. Languages:** *[indicate proficiency in each language as good, fair or poor for speaking, reading and writing]* \_\_\_\_\_

**10. Employment Record:** *[starting with present position, list every employment held since graduation, stating dates of employment, employing organisation and positions held]* \_\_\_\_\_

**From:** *[year]* \_\_\_\_\_ **To:** *[year]* \_\_\_\_\_

**Employer:** \_\_\_\_\_

**Positions held:** \_\_\_\_\_

<p><b>11. Detailed Tasks Assigned:</b></p> <p><i>[list all tasks to be performed under this assignment]</i></p>	<p><b>Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned:</b></p> <p><i>[indicate the following information for those assignments that best illustrate the member of staff's capability to handle the tasks listed under point 11]</i></p> <p>Name of assignment or project: _____</p> <p>Year: _____</p> <p>Location: _____</p> <p>Client: _____</p> <p>Main project features: _____</p> <p>Positions held: _____</p> <p>Activities performed: _____</p>
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<p><b>12. Current Commitment</b></p>	<p><i>[indicate the following information for those assignments that you are currently undertaking]</i></p> <p>Name of assignment or project: _____</p> <p>Expected completion date: _____</p> <p>Location: _____</p> <p>Client: _____</p> <p>Main project features: _____</p> <p>Position: _____</p> <p>Activities being performed: _____</p>
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**13. Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

\_\_\_\_\_  
*Signature of staff member or authorised representative of the staff*  
*Day/Month/Year*

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

Full name of authorised representative: \_\_\_\_\_

\_\_\_\_\_

## STATEMENT OF EXCLUSIVITY AND AVAILABILITY<sup>2</sup>

I, the undersigned, hereby declare that I agree to participate exclusively with the tenderer **<tenderer name>** in the above-mentioned service tender procedure. I further declare that I am able and willing to work for the period(s) foreseen for the position for which my CV has been included in the event that this tender is successful, namely:

From	To
< start of period 1 >	< end of period 1 >
< start of period 2 >	< end of period 2 >
< etc >	

I confirm that I am not engaged in another RA-funded project in a position for which my services are required during the above periods.

By making this declaration, I understand that I am not allowed to present myself as a candidate to any other tenderer submitting a tender to this tender procedure. I am fully aware that if I do so, I will be excluded from this tender procedure, the tenders may be rejected, and I may also be subject to exclusion from other tender procedures and contracts funded by the RA.

Furthermore, should this tender be successful, I am fully aware that if I am not available at the expected start date of my services for reasons other than ill-health or *force majeure*, I may be subject to exclusion from other tender procedures and contracts funded by the RA and that the notification of award of contract to the tenderer may be rendered null and void.

<b>Name</b>	
<b>Signature</b>	
<b>Date</b>	

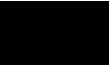
<sup>2</sup> To be completed by all key experts

Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.

Staff input should be counted from the start date of the assignment and indicated in weeks or months, as appropriate. Professional staff should be indicated individually by name; support staff should be indicated by category e.g. clerical staff. Input should be indicated separately for input at home and in the field and for foreign and national staff, for the purpose of calculating travel, subsistence etc.

### T7 Staffing Schedule

No	Name of Staff	Foreign / National	Staff Input (specify weeks or months)												Total Staff Input		
			1	2	3	4	5	6	7	8	9	10	11	12	In Malawi	Outside Malawi	Total
<b>Totals</b>																	

 Full time input  
 Part-time input

*Note to Bidders: The information requested is required in the format provided below and should be included by the Bidder in its technical proposal.*

*Indicate all main activities of the assignment, including milestones such as submission of reports and other deliverables. For phased assignments, indicate activities separately for each phase.*

**T8 Work Schedule**

No	Activity	Time Period <i>(specify weeks or months)</i>											
		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>

*Note to Bidders: This Financial Proposal Submission Sheet should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder. It should be included by the Bidder in its financial proposal.*

## F1 Financial Proposal Submission Sheet

Date: **[insert date (as day, month and year) of proposal submission]**

Procurement Reference No: **[insert Procurement Reference number]**

To: **[insert complete name of Procuring Entity]**

We, the undersigned, declare that:

- (a) We offer to provide the consulting services for **[insert a brief description of the Services]** in conformity with your Request for Proposals and our technical and financial proposals;
- (b) The total price of our proposal is: **[insert the total proposal price in words and figures, indicating the various amounts and the respective currencies]**, inclusive of local taxes **[amend if local taxes are not required to be included]**;
- (c) Our proposal shall be valid for a period of [specify the number of calendar days] days from the date fixed for the proposal submission deadline in accordance with the Request for Proposals, and it shall remain binding upon us, subject to any modifications resulting from negotiations, and may be accepted at any time before the expiration of that period;
- (d) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: **[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity. If none has been paid or is to be paid, indicate "none"]**;

Name and address of Recipient	Purpose Reason	Currency and Amount

- (e) We understand that you are not bound to accept any proposal that you receive;

Name: **[insert complete name of person signing the proposal]**

In the capacity of **[insert legal capacity of person signing the proposal]**

Signed: **[signature of person whose name and capacity are shown above]**

Duly authorised to sign the proposal for and on behalf of: **[insert complete name of Bidder]**

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ **[insert date of signing]**

*Note to Bidders: If BDS 14.3 requires the proposal price to be quoted separately for different Activities, complete this form as a “Summary of Activity Price” for each activity and complete one overall Summary of Proposal Price.*

*State the currencies under (currency 1), (currency 2) etc. Delete unused columns.*

*For lump sum contracts, this financial information will be used as a breakdown of contract price in Appendix C of the contract. For unit price contracts, this financial information will be used as the breakdown of cost estimates in Appendix C of the contract.*

## **F2 Summary of Proposal (or Activity) Price** **(Breakdown of Lump Sum or Cost Estimates)**

**State activity name or total proposal:** \_\_\_\_\_

	Cost item	Cost (MWK)		
		Design Phase (First 10km section)	Design Phase (the rest of the road section)	Construction Supervisison Phase
1	Fees			
2	Direct Costs			
3	Miscellaneous Costs			
4	Cost for Mentoring of Graduate Engineers	n/a		n/a
5	Provisional Sum for Training of Client's Staff	n/a	50,000,000	n/a
6	% for Handling Costs on item 5 above	n/a		n/a
7	VAT on Fees			



	Sub-Total			
	Grand Total			

*Note to Bidders: Complete this form for the total proposal or for each activity as indicated in the ITB.*

*The Bidder should complete a separate form for each currency or add currency columns and show up to three totals. Where required, enter separate rates for home and field work.*

### F3 Summary of Fees

**State activity name or total proposal:** \_\_\_\_\_ **Currency:** \_\_\_\_\_

Name	Position	Input Qty	Unit <i>(Days/months etc)</i>	Rate	Total
<b>Total</b>					

*Note to Bidders: Bidders may reproduce this form in landscape format, but are responsible for its accurate reproduction. The Bidder should complete a separate form for each currency or add currency column and show up to three totals. Complete this form for the total proposal or for each activity as appropriate.*

**F4 Summary of Direct Costs**

**State activity name or total proposal:** \_\_\_\_\_ **Currency:** \_\_\_\_\_

Description of Cost	Quantity	Unit of Measure	Unit Price	Total Price
<b>Total</b>				

Notes Local transportation costs are not to be included if local transportation is being made available by the Procuring Entity. Similarly, the project site, office rent/accommodations/clerical assistance costs are not to be included if being made available by the Procuring Entity.

All other costs related to the study not specifically provided for in the financial proposal shall be deemed to have been included in the other rates.

## Section 5. Eligible Countries

**Procurement Reference Number: RA/CON/DEV/CR/KU-MC/UP/2024-25/31**

All countries are eligible except countries subject to the following provisions.

A country shall not be eligible if:

- (a) as a matter of law or official regulation, the Government of the Republic of Malawi prohibits commercial relations with that country, provided that the Government is satisfied that such exclusion does not preclude effective competition for the provision of the services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Government of the Republic of Malawi prohibits any procurement of services from that country or any payments to persons or entities in that country.

## **Terms of Reference**

**Consultancy Services for Feasibility Study and Detailed Engineering Design and Construction Supervision for the Upgrading of Santhe – Mkhota – Kapiri (D164/D163) Road in Kasungu and Mchinji Districts**

## Terms of Reference

### **Consultancy Services for Feasibility Study and Detailed Engineering Design and Construction Supervision for the Upgrading of Santhe – Mkhota – Kapiri (D164/D163) Road in Kasungu and Mchinji Districts**

#### **1.0 Background**

The policy of the Government of Malawi (GoM) towards the roads sub-sector is to build, maintain and ensure efficient utilization of the road infrastructure and other services appropriate to meet the current and future development needs of the economy. This includes helping the people in the rural areas to gain access to income generating activities, such as agricultural activities and to social services such as hospitals, schools etc. by providing reliable and durable roads; thus facilitating the continued development of the country's rural areas through increased agricultural production, the mainstay of the country's economy.

The current project contributes significantly to this objective since it is aimed at providing reliable and durable bituminous road and bridges, which will enhance the usage of the road network. Currently this is an earth road which is in continuous deteriorating due to mostly environmental factors and becomes very slippery in some sections during the rainy season.

The Roads Authority intends to apply part of the resources Roads Fund to finance the Feasibility Study and Detailed Engineering Design and Construction Supervision for the Upgrading of Santhe – Mkhota – Kapiri (D164/D163) Road in Kasungu and Mchinji Districts Road to bitumen standard. Consultancy services are therefore required to carry out an economic and environmental feasibility study, social impact assessment, detailed engineering design and preparation of bidding documents for the upgrading works and construction supervision for the upgrading works.

The Consultant shall be required to carry out design services for the first ten kilometres and submit the tender documents complete with bidding documents, construction drawings, Environmental and Social Impact Assessment Reports and the associated Abbreviated /Resettlement Action Plan as a separate assignment, as detailed in these Terms of Reference. This arrangement will enable the Client to tender out the works for the first 10km section while the rest of the road section is being designed. The design for the rest of the road section will be done concurrently with that for the first 10 km.

The first 10km section will have its own timelines for completion and its own payment schedule. The Consultant may choose to use a different team of experts during the design period so that the services do not interfere with the completion of the main services. The Consultant will discuss and agree the

implementation strategy with the Client regarding the key staff during the design phase at the negotiation meeting.

## 2.0 Description of the Road Project

The Consultancy Services for Feasibility Study and Detailed Engineering Design and Construction Supervision for the Upgrading of Santhe – Mkhota – Kapiri (D164/D163) Road in Kasungu and Mchinji Districts is approximately 42 kilometres long. The project road starts as D164 in Kasungu District at the junction with S117 and proceeds to join the D163 at Mkhota and with a spur to S115 at Mzama School and terminates at Nthema on the M018 near Kapiri in Mchinji District.

The project road mainly traverses the flat terrain of the Lilongwe – Kasungu Plain. However, the road section is characterized by a swampy area and is slightly rolling terrain. The project road is slippery during the rainy season.

## 3.0 Objectives of the Assignment

The objectives of the assignment are to:

- (i) Investigate and determine the technical and economic feasibility, and the environmental and social impacts of upgrading of the Santhe – Mkhota – Matutu - Kapiri (D164/S115/S116) Road in Kasungu and Mchinji Districts to an all-weather bitumen paved road.
- (ii) Prepare detailed engineering designs based on the findings of the feasibility study as well as of the preliminary design and to prepare tender documentation for the upgrading works (national competitive bidding).
- (iii) Carry out supervision of the construction of the road in accordance with the accepted standards of the engineering profession and to ensure that the work is carried out in accordance with the conditions, drawings and specifications, and within the programme and budget for the construction contract.

## 4.0 Scope of the Services

The services are expected to be performed in three phases, namely:

**Phase 1** - Feasibility Study with Economic Assessment, Environmental and Social Impact Assessment, Resettlement Action Plan (RAP) and Preliminary Engineering Design of the road.

**Phase 2** - Detailed Engineering Design, and production of Bidding Documents suitable for National Competitive Bidding.

**Phase 3** – Construction Supervision of the Upgrading works.

The services are expected to be performed in line with the Guidelines and Checklists for this monitoring of Road Design Projects (GCMRDP). In addition the design shall adopt the principle of 'Building Back Better' with respect to climate resilience. In this respect, the consultant is expected to use the Malawi Guidelines for the Road Sector to increase its Resilience to the Effects of Climate Change.

## **4.1 Phase 1 – Feasibility Study with Preliminary Engineering Design**

### **4.1.1 Feasibility Study - Scope of the Services**

The feasibility study shall investigate the economic and social viability for the upgrading of the existing earth road of Santhe – Mkhota – Matutu - Kapiri (D164/S115/S116) Road in Kasungu and Mchinji Districts to Bitumen Surfaced Standard. The Feasibility Study shall comprise an Economic Feasibility Study, Environmental and Social Impacts Assessment Study together with Preliminary Engineering Design. The consultant will also be required to make recommendations of the most viable option in terms of cost and environmental/social considerations.

### **4.1.2 Economic Feasibility Study**

#### **(a) Traffic Count Survey**

The Consultant shall carry out manual classified traffic counts for a period of seven consecutive days on a minimum of 2 counting stations. The counts are to include non-motorized traffic and are to be conducted over an 18 hour period, 04:00-22:00 hours and must include at least one 24 hour weekday count and one 24 hour weekend count for purposes of estimating night traffic.

The 18 hour counts shall be grossed up to 24 hour values in the same proportion as the 18-hour/24-hour split on those days when 24 hour counts have been undertaken.

The consultant shall also count the different traffic vehicle categories for calculation of the equivalent axle loads.



Counts should be avoided at times when traffic activity is abnormal for short periods due to public holidays, public functions, market days, etc.

The counts shall be carried out using the format as per traffic count form attached as Annex 1.

Regarding traffic data, any available historical information on classified traffic counts as provided by RA shall be studied.

### **(b) Origin and Destination Survey**

A three-day 18 hour (minimum) Origin and Destination survey shall be carried out at a location to be agreed with the Client. The OD survey shall collect at least the following data:

- i. Time
- ii. Registration number
- iii. Trip origin
- iv. Trip destination
- v. Trip type (i.e local, regional, international)
- vi. Vehicle type (per the RA's categories)
- vii. Vehicle manufacturer and make
- viii. Number of passengers
- ix. Goods carried and quantity

A sample form for collection of OD data is attached as Annex 2

### **(c) The Socio-economic Profile of the Project**

The consultant shall describe the socio-economic profile of the project road's area of influence, taking into account accessibility of local residents to:

- Workplaces
- Markets
- Key social services including health and education

### **(d) Traffic Forecasts**

Traffic forecast shall be prepared for a 15/20 year period following opening of the upgraded road to traffic.

The consultant shall estimate the nature and volume of traffic forecast to use on the road by analyzing traffic counts, origin-destination studies and the present volume of freight and passenger movements on the road under study. The Consultant shall also identify, describe

and quantify existing and potential diverted and generated traffic. On the diverted and generated traffic, it will be extremely important to consider trends on recently upgraded roads as this will give a more realistic estimation of such traffic once the road is opened.

The consultant shall make an annual traffic forecast for a period of 10 years after the upgrading of the road route and more general projections of future traffic for the following 10 years.

The traffic forecast shall be given at three growth rates namely: low, medium and high. The consultant shall use these three growth rates in obtaining the economic internal rate of return (EIRR) of the project. The consultant shall give his estimate of probability of occurrence of projected growth rates and his rationale for the probabilities selected.

### **(e) Economic Analysis**

- i. Vehicle operating costs shall be prepared by means of primary data collection on current prices and values of, inter alia, vehicles, tyres, crew and maintenance labour wages, fuel and lubricants. The consultant shall produce the motorized transport road users cost summary per vehicle km by vehicle class.
- ii. The consultant shall identify and quantify Benefits using HDM-4 over the analysis period. Benefits categories shall include key items classified under road user effects in the HDM-4 terminology:
  - VOC savings
  - Passenger time savings
  - Reduction in costs arising from accidents.
  - Savings in road maintenance expenditure;

Any consideration given to significant changes in the alignments shall be included within the framework of the economic analysis.

- iii. It is important to note that the economic analysis shall include the following cost items:
  - Construction
  - Supervision
  - Maintenance
  - Land acquisition and resettlement
  - Environment mitigation and monitoring measures
  - STD/HIV/other pandemic awareness and mitigation component
  - Safety awareness and mitigation measures.

- iv. The Consultant shall calculate the NPV, IRR and First Year Rate of Return including:
  - All identified benefits
  - VOC savings
- v. The consultant shall carry out sensitivity tests for NPV and IRR with reference to:
  - Construction cost variations of +10% and +20%
  - Variations of traffic levels over the life of the project of +/-10% and +/-20%.

The sensitivity analysis shall include a switching value analysis for construction costs and traffic levels.

The Consultant shall execute a stochastic risk analysis on the central deterministic NPV and IRR estimates. The Consultant shall utilize a recognized risk assessment software package to generate triangular type probability distributions for those variables considered most likely to influence project net benefits including investment costs and traffic growth.

#### **4.1.3 Preliminary Engineering Design Investigations**

The Consultant shall carry out the tasks as follows:

##### **(a) Topographic Surveys**

The Consultant shall promptly initiate and carry out the surveys of the project road. Surveys shall use the UTM co-ordinate system and the ARC-1950 datum consistent with Malawi topographic mapping System.

##### **(i) Control Survey**

- The control survey shall be carried out ahead of the topographic survey. The collection of topographic survey data shall not commence until the relevant section of the control survey has been completed, checked and errors redistributed according to normal survey practice. The control survey shall require prior verification by the Client on site.
- Control surveys shall be conducted using Optical or GPS methods.
- The control survey shall originate and terminate at a National Survey Beacon and shall take the form of an open or closed traverse.
- The control survey shall establish intervisible beacons at approximately 300m intervals along the entire length of the project road. Beacons shall be located beyond the expected limit of road and drainage works.

- Each beacon shall consist a steel pin 500mm in length set in concrete monument 300mm x 300mm x 300mm. The reference number of the beacon shall be scored indelibly into the concrete. A sketch shall be prepared for the location of each beacon and the co-ordinates of the beacon indicated on the sketch.
- The level of each beacon shall be established by double run spirit leveling. Ellipsoidal levels from GPS shall not be acceptable.
- The Consultant shall provide photographic evidence of all the control points used in the survey using the control point data collection template attached as Annex 3.

(ii) **Topographic Survey**

The necessary topographic surveys shall be carried out in the road reserve of the existing road. Sections will be surveyed to form a Digital Ground Model (DGM sometimes called DTM) representing the significant aspects of the landscape (road centerline, edge of surfacing, edge of shoulder, top of ditch, bottom of ditch, ditch liner, public utilities etc). The topographic survey shall also capture all the properties, utility services and crops/trees within the road reserve (the information shall be linked to the property assessment in the resettlement assessment plan). For rivers and major streams, the survey shall be carried out a minimum of 250m upstream and downstream and a width of 100 metres. The distance between the cross sections shall be 25 metres for the road alignment and 10 metres for the bridge survey. The proposed geometric alignment is expected to generally follow the existing alignment with minimum improvements necessary to achieve the minimum design standards, as agreed with the Roads Authority (RA). The co-ordinates of all the intersection points shall be tied into the National Survey Grid and levels related to the National Benchmarks.

The following deliverables from the survey shall be presented with the draft feasibility study report;

- a. Schedule of all control beacons complete with beacon sketches and co0ordinates;
- b. DTM in AutoCAD format (dwg or dxf) defined using 3D faces (AutoCAD mesh);
- c. X, Y, Z data for all survey points in comma delimited ASCII format including all coding;
- d. Existing plan and profile drawings 1:1000(H), 1:100(V) at A1 size, reduced to A3 size;
- e. Tabular presentation of the existing road vertical and horizontal geometry.

In addition to the requirements outlined above, the consultant shall follow and adhere to the checklist in Annex 4.

**(b) Road Condition and Materials Investigation Survey**

The influence of geology and the availability of road construction materials and water are of major importance for road construction costs.

The scarcity of conventional road construction materials and the appropriate and economic usage of those available in the general road route corridor are viewed as key factors influencing the choice of pavement and surfacing design. The potential for any specific problem associated with the use of proposed materials must be investigated adequately and appropriate measures recommended. The consultant shall also carry out centre line soil surveys at reasonable intervals as a basis for the establishment of subgrade conditions for design purposes.

Tests shall be carried out on the existing pavement materials to determine the quality and suitability of the materials for use as the subbase/subgrade for the rehabilitated/upgraded road. In addition, material surveys, sampling and soils investigations will be carried out on prospective borrow pits as potential sources of materials for construction. These tests shall also be carried out along any alternative alignments which have been agreed upon.

Detailed soil investigations shall be carried out on all the types of soils and materials in accordance with the current internationally accepted standards such as AASHTO and ASTM or BS1377:1990. Minimum frequencies of tests are to be as follows:

- Dynamic cone penetration tests (DCP) shall be carried out along the existing road at least every 200m with intervals being shorter where there is a significant change in the existing pavement layers and taking into account whether the location is on the existing pavement or on a proposed realignment. These shall be accompanied by the respective moisture tests.
- Trial pits of adequate size shall be excavated every 1000m along the alignment to correspond with DCP tests described above with intervals being shorter

where there is a significant change in the existing subgrade material and taking into account whether the location is on existing pavement or on a proposed realignment. For each pit, each pavement layer shall have field density tests done and the material retrieved shall undergo plasticity tests, particle size analysis tests, moisture/density tests, California Bearing Ratio (CBR) tests. Adequate additional tests shall be carried out to test the suitability of the materials for stabilisation by cement or lime. The trial pits shall be profiled and each shall be photographed with a measuring stick/scale in the pit.

- Road roughness shall be measured along the alignment and the data converted to give the International Roughness Index.
- Investigations for potential sources of materials for the construction of the pavement, earthworks and structures shall also be carried out and sites of potentially suitable materials surveyed and shown in the materials section of the engineering report. Testing and analysis shall be carried out as necessary on the construction materials. The Consultant shall make adequate tests to prepare alternative designs of sub-base, base and wearing courses with different materials, viz naturally occurring gravel stabilized with cement or lime or blended with crushed stone.
- Samples of potential construction materials shall be tested where necessary for particle size distribution and plasticity characteristics; linear shrinkage, maximum dry density and optimum moisture content, aggregate crushing value, ten percent fines value (dry and soaked state), bitumen affinity and chemical analysis as required. Other relevant tests that may be necessary as prescribed shall also be undertaken.
- Possible borrow pits shall be located as close to the road as possible.
- At least one quarry as a possible source of aggregates shall be located. The aggregates shall undergo the necessary, grading tests, strength/ durability tests, chemical tests, flakiness tests, bitumen adhesion tests and other tests as necessary.
- The bulk samples shall be kept permanently marked until after approval of the Detailed Engineering Design.
- Sources of water and fine and coarse aggregates for construction purposes shall be investigated for quality and adequacy in quantity.
- At major culverts and bridge sites, sub surface conditions shall be assessed by the use of trenching, hand auguring or drilling as required. In situations

where bedrock is encountered, the consultant shall carry out the relevant rock quality tests.

- The materials testing arrangements and programme shall be presented by the Consultant and approved by the Client prior to the investigation and testing commencing.
- The tests to be carried out shall include but not limited to the following:

#### **Fill and sub-grade**

- a) Grading
- b) Atterbergs Limits;
- c) Moisture/density relationship (AASHTO T180), and
- d) California bearing ratio (CBR) and swell after 4-days soaking for each typical soil type identified;

#### **Potential gravel sources**

- a) Grading;
- b) Atterbergs Limits
- c) California bearing ratio
- d) Lime/Cement stabilisation for the sub-base
- e) Mechanical modification for sub-base
- f) Laboratory DN (For LVSR approach)

#### **Potential sources of hard stone**

- a) Ten per cent Fines
- b) Los Angeles Abrasion
- c) Aggregate Crushing Value
- d) Sodium Sulphate Soundness
- e) Bitumen Affinity
- f) Specific Gravity and Water absorption, and
- g) Chloride and Sulphate Content.

Sources of water and fine and coarse aggregates for construction purposes shall be investigated for quality and adequacy in quantity.

### **(c) Hydrological and Hydraulic Assessment.**

Hydrological investigations shall be carried out on all of the drainage structures and their adequacy in terms of hydraulic capacity shall be assessed. Where the structures are found to be hydraulically inadequate, preliminary design shall be prepared for the new drainage structures. The peak flood estimation shall be

based on a comparative assessment of results from at least three flood estimation formulae applicable for the region.

The catchment areas, run-off factors and design discharge flows shall be determined for each drainage structure and the corresponding maximum water level established which shall be the basis for determining the finished road level (after taking into consideration the allowable free board and the bridge deck configuration). The flood return period(s) utilized for the design of culverts and other drainage structures shall be selected from an engineering and economic analysis to determine the optimum period for the road and type of structure from hydrographic data pertinent to the topography and terrain through which the road is located.

The hydrological and hydraulic analysis shall also take into account issues of climate resilience by among other issues checking the sensitivity of the proposed drainage structures to higher flood return periods than those specified in the design manual.

**(d) Structural Condition Survey**

The structural condition of all the existing drainage structures shall be assessed. At major culverts and bridge sites, sub surface conditions shall be assessed by the use of trenching, hand auguring or drilling as required.

**(e) Inventory of Road Furniture**

An inventory of any existing road furniture shall be prepared.

**4.1.4 Preliminary Engineering Design - Design Approach**

The consultant shall determine the design approach for the road (i.e. either conventional design or LVSR design) based on the estimated design traffic. This entails that traffic studies shall precede all activities. The recommended design approach shall be submitted to the client for approval.

In order to minimize compensation costs on the project and also taking advantage of consolidation effects on the existing road, the designed road should follow the existing road unless agreed otherwise with the Client. Other alignment options shall be investigated with comparison of cost estimates for the proposed alternatives under consideration of EIA and RAP.

**4.1.5 Preliminary Engineering Design**

The Consultant shall carry out a preliminary design of the road project in accordance with the relevant design guideline (SATCC Draft Code of



Practice for the Geometric Design of Trunk Roads September 1998 and the pavement design has to be in line with the SATCC Code of Practice for the Pavement Design.

**i. Design Options and Standards**

The consultant shall, based upon the results of the traffic studies and projections and the preliminary engineering investigations, discuss and recommend alternative design options, ascertain the merits and demerits of each option, evaluate each in terms of the total transport costs, compare them and select appropriate design standards for the preferred road as follows:

**ii. Design Speed**

The consultant shall discuss and recommend the appropriate design speed for the project road. Different design speeds may be applicable on different sections of the road.

**iii. Cross Section**

The consultant shall discuss and recommend standard cross sections for the cut and fill scenarios encountered on the project road and recommend travelled way and shoulder geometry as well as a range of side slopes, ditch profile etc. to suit all situations. The cross section shall have concrete edge beams throughout the alignment.

**iv. Design Life**

The design life of the road shall be 15/20 years (whichever is appropriate).

**v. Axle Loading and Pavement Design**

Taking the survey of the different traffic vehicle categories into consideration the consultant shall make use of the appropriate traffic equivalent factors in accordance with the SATCC pavement design manual and guideline.

**vi. Preliminary Design Drawings**

The drawings (with a soft copy in AutoCAD) shall be produced to the following scales in A3 sizes:

- Location plans: as part of the whole of Malawi 1: 1,000,000
- Additional location plans at a scale of 1:50,000.00
- Horizontal and Vertical Alignment 1: 2,000/200
- Typical Cross-sections with the proposed pavement design 1: 25
- General layout of bridge and drainage structures 1: 50
- Cross sections are to be taken at minimum intervals of 25m

Preliminary hydraulic and structural designs shall be prepared for all suggested new bridges and drainage structures.

A schedule and location of all proposed new road furniture shall also be compiled.

### **(c) Preliminary Cost Estimate**

The Consultant shall prepare an estimate of the construction costs based on current unit rates for similar works and the estimated quantities of work.

#### **4.1.6 Road Safety Assessment**

The Consultant shall gather basic statistics on the number of road accidents, the number of deaths, and number of injuries for each kilometre or section of the route for each of the previous three years. This data will be included, along with national statistics and trends on road accidents, as an appendix to the feasibility report. The feasibility report shall include a section on road safety, indicating typical current problems along the existing route and outlining what will be done within the project to enhance road safety. If alternative alignments and standards are considered, the evaluation must cover the road safety aspects.

#### **4.1.7 Environmental and Social Impact Assessment**

The Consultant shall conduct an Environmental and Social Screening and then write a Project Brief to Malawi Environment Protection Authority in order to get terms of reference that will be used to conduct and write Environmental and Social Impact Assessment (ESIA) report in accordance with the Environmental Management Act of 2017 and the guidelines which are appended as Annex No 5, 8, and 9, including a full Environmental Mitigation and Monitoring Plan (EMMP). In that regard, the Consultant shall also consider the socio-economic implications of the proposed road rehabilitation/upgrading works and make a preliminary assessment of the number of persons that will be displaced, if any, and the amount of compensation that will be required for structures, trees and other assets including land, that will be affected by the upgrading works. The Consultant shall also consult with affected persons and local community leaders.

#### **4.1.8 Resettlement Action Plan**

Depending on the outcome from Environmental and Social Impact Assessment under Section 4.1.7, the Consultant shall prepare either a full or an abbreviated Resettlement Action Plan (RAP) in accordance with the guidelines which are appended as Annexes No. 6 and 7.

### **4.2 Phase 2 – Detailed Engineering Design**

The Consultant shall undertake the detailed engineering design as outlined below.

#### **4.2.1 Topographic surveys**

- (i) The Consultant shall confirm the computation and definition of the geometric characteristic of the road along the centerline. Setting out data shall also be given for points at regular intervals along curves and the longer tangent alignments. Vertical alignment is to be checked and defined.
- (ii) The construction drawings will clearly define all the relevant setting out details for all the various elements of the work.

#### **4.2.2 Detailed Soils and Materials Investigations for major structures**

- (i) At bridge sites and or other major structures, sub surface conditions shall be investigated by trenching, hand augering and/or drilling as required including taking of undisturbed samples and standard penetrometer tests.

#### **4.2.3 Detailed Geometric Road Design**

The Consultant shall further detail the preliminary horizontal and vertical alignment for the upgraded road sections to ensure its compliance with the standards as stipulated in the SATCC Draft Code of Practice for the Geometric Design of Trunk Roads. The basis of the detailed geometric design shall be the agreed preferred route during the preparation of the preliminary engineering design.

#### **4.2.4 Pavement Design**

The optimum pavement design for the new road, in particular under consideration of availability of construction materials shall be confirmed after discussions with the Client. For that purpose the consultant shall review the traffic data collected with regards to traffic composition, occupancy and volume counts. Forecasts for a life span of 15/20 years (whichever is appropriate) shall include traffic of normal, generated, diverted traffic as well as future traffic growth. The traffic forecast shall be

given at three growth rates, namely: low; medium and high. The correct assumptions for the growth rates are extremely crucial for the pavement design and have to be discussed with the client. The Consultant shall then use these three accepted growth rates in obtaining the cumulative equivalent standard axles (ESAs) for the three scenarios. For that discussion the pavement design shall be verified by comparison with at least two other internationally accepted methods in order to produce an optimum design for the project.

#### **4.2.5 Structural Design**

All existing data and the results of the field investigation for soils, foundations, hydrology etc. shall be analyzed and used as the basis for the design of drainage structures, which shall be supported by detailed hydraulic computations and foundation designs.

The Consultant shall verify and develop the preliminary designs for bridge and drainage structures and produce detailed designs in accordance with the draft Bridge Design Specifications, November 1988, of the Ministry of Works and Supplies in conjunction with the provisions of BS 5400: Steel, Concrete and Composite Bridges, Parts 1, 2, 3,4,5,9 and 10 as appropriate and as amended by the provisions of the relevant UK Department of Transport Memoranda. Specifications and recommendations for materials and workmanship are given in Parts 6, 7, 8 and 9.2 of BS 5400. These parts should be read in conjunction with the SATCC Standard Specifications for Roads and Bridge Works.

The provisions of BS 5400 Part 2: loading, will be adjusted and amended in consultation with the Roads Authority to take into account of local conditions in Malawi. In implementing these adjustments and amendments due guidance shall be taken from the SATTTC Draft Code of Practice for the Design of Road Bridges and Culverts September 1998. Sections of BS 5400 Part 2 to which this paragraph particularly applies are as follows:

- 5.3 Wind load
- 5.4 Temperature
- 6.0 Highway Bridge live loads

#### **4.2.6 Road Safety**

##### **a. Accidents Statistics**

The consultant shall make contact with the Department of Road Traffic and Safety Services and Malawi Police Stations along the project road to obtain from them such accident statistics as may exist for the project road as well as details of the main causative factors in accidents and the locations of known accident black spots. Particular attention should be

paid to accidents and black spots involving non-motorized transport and pedestrians.

#### **b. Road Safety Audit**

The reconnaissance inventories will include the location and extent of significant road side land use, particularly as it impacts on non-motorised road use and related safety issues.

The Road Safety Audit shall consider aspects such as inferior road geometry, poor sight distances, inadequate junctions or provisions for turning, slow moving traffic, informal trading and in particular any history of accident or known black spots.

#### **4.2.7 Economic Assessment**

The Consultant shall update the economic assessment prepared under Phase 1, taking into account the latest traffic data and the final estimated construction cost of the detailed design for the project. In the event of the interval between Phase 1 and Phase 2 of the services being greater than nine months, the traffic counts referred to earlier shall be repeated.

#### **4.2.8 Bill of Quantities, Bidding Document and Cost Estimate**

##### **(a) Bill of Quantities**

Calculated quantities for the items of work to be executed shall be based on the finalized construction drawings. A final detailed bill of quantities shall be produced in compliance with SATCC Draft Standard Specifications for Road and Bridge Works as closely as possible. Where items don't fall within the Standard Specifications, these shall be clarified in the Particular Specifications, based on the final detailed engineering design. A breakdown of quantities calculations will be supplied to the client in electronic form.

##### **(b) Bidding Document**

The Bidding document shall be prepared fully in accordance with the New Standard Bidding Document templates of Roads Authority. For this project, the FIDIC Conditions of Contract for Construction for Building and Engineering Works Designed by the Employer (2017) shall apply. The Client will provide the consultant with the electronic copy of that particular template, which will then be the working basis of the new bid document and which should be changed by the Consultant only as far as the new project requires.

In terms of Technical Specifications the SATCC Standard Specifications for Road and Bridge Works, 2001, shall be applicable. All references to SABS in the standard specifications shall be reviewed

and changed to the equivalent SANS. The Particular Specifications which supplement the Standard Specifications shall be changed by the Consultant only in line with the new project requirements. The Consultant shall in particular avoid significant changes to Section 1400 without consulting the Client.

### **(c) Engineering Drawings**

The Consultant shall prepare the following detailed engineering drawings in A1 and A3 sizes for each section for which a detailed design is prepared:-

- (i) Location plans as part of or whole of Malawi at a scale of 1:1,000,000
- (ii) Plan and profile drawings to a scale of 1:1,000 horizontal and 1:100 vertical for A1 size drawings, and 1:2,000 horizontal and 1:200 vertical for A3 size drawings showing running chainages, natural ground levels and design levels all at 25m intervals, horizontal and vertical curve details, side drain locations, descriptions and references to all drainage and bridge works, location and values of benchmarks and traverse stations, location of road furniture, contour lines superimposed on plans, the boundaries of the road reserve and any other relevant information, in a format approved by the client.
- (iii) Typical cross sections, scale 1:25 showing all details of road cross section cuts and fills, side drains, pavement thickness, camber and super elevation, shoulders and pavement widening.
- (iv) Cross sections at minimum intervals of 25m for the entire project.
- (v) Typical culverts: showing details of all types of culverts and other drainage structures, their inlets and outlets including the protection works necessary for the project.
- (vi) Major structures: For all bridge structures, detailed engineering design plans will be produced at appropriate scales, including contoured site plans, substructures and foundation details, protection or ancillary works and bar bending schedules.
- (vii) Soils plan or table showing the characteristics of soils for various sections of the route.
- (viii) Ancillary Works: showing plans of all other ancillary works including related works.

- (ix) Road furniture: Having due regard to current practice, ensure appropriate road furniture, pavement markings and traffic calming measures.
- (x) Accommodation of traffic: The Consultant shall prepare a traffic operation plan detailing the construction sequencing, use of traffic control devices and other activities designed to minimize traffic distraction. This operation plan will be complemented by drawings showing typical traffic management, including appropriate signage for the typical construction situations expected to be encountered.
- (xi) The Consultant is to produce a mass-haul diagram for the earthworks and pavement materials required to complete the project.

**(d) Cost Estimate**

- (i) The Consultant shall prepare an estimate of the construction cost based on the final bills of quantities. The cost estimates will be based on unit price analysis for each pay item based on current unit rates for similar works. A detailed comparison of the overall bid price/km of other similar contracts awarded through international competitive bidding shall also be included.
- (ii) The consultant shall submit "taking off" sheets for all the Bill items.
- (iii) The Consultant shall prepare separate cost estimates for supervision of the construction works for each section of the road (consultancy services). He shall provide a detailed estimate including (but not limited to) the total required inputs for construction supervision in terms of man months for senior engineering and technical staff, costs of construction and post construction services, direct operating costs, reimbursable expenses, and miscellaneous costs.

**4.2.9 Work Programme and Cash Flow Forecast**

In order to assist in preparing the required construction period and forward budget needs, the consultant shall prepare a work programme and cash flow requirements showing:-

- A bar chart showing the proposed sequencing and duration of the major activities for the entire construction period.
- Anticipated monthly value of work executed presented in the form of an S-curve.

In preparing this programme, the Consultant shall take into account the climatic conditions prevailing in the areas concerned.

#### 4.2.10 Additional Services- Training of Client's and other Staff.

##### a) Mentoring of Graduate Engineers

The consultant, through their key personnel, shall mentor two graduate engineers nominated by the client during the performance of the consultancy services. The mentoring of the graduate engineer shall cover all aspects of the design process from undertaking the various investigations, carrying out the design and preparation of the tender documentation.

The Client will be responsible for all costs which will be incurred by the graduate engineers during the mentoring period such as transport and accommodation.

The consultant shall mentor the graduate engineers in all stages of the project cycle such as Traffic Assessment, Topographic Survey, Soil Sampling and Material Testing, Geometric Design, Pavement Design, Hydrology and Hydraulic Analysis and Design of Water Structures such as Bridges, Culverts etc, Economic feasibility studies, Environmental and Social Impact Assessments, Preparation of Bidding Documents and Road Safety,

##### b) Training of Client's staff and provision of training materials and equipment

The consultant shall facilitate training for Client's staff on specific areas of road and bridge design. The Consultant shall identify a qualified expert with hands on experience in a particular field and will be responsible for his travel and accommodation expenses. The expert shall be approved by the Client. The expert will, in liaison with the Client, determine the duration of the training including the number of sessions. The training shall include theory and practicals. The consultant shall be responsible for paying for the venue for the training, lunch and refreshments and allowances for the staff to be trained. The consultant shall provide training materials and equipment which may include software design application.

The client shall identify the area of interest for training and shall determine the number of staff to be trained.

At the instruction of the Client, the Consultant will be requested to purchase tools, Personal Protective Equipment (PPE), equipment and softwares and these will be retained by the Client. The cost of these will be claimed under the provisional sum in the financial proposal.



## 5.0 Key Professional Staff

The Consultant shall provide sufficient resources to carry-out all the services required under this assignment phase and the input together with minimum requirements for the key professional staff are as indicated below. All the key professional staff should have graduate/first degrees as a minimum qualification. The Consultant will be required to apportion the key professionals' contingent and inputs to the technical proposal.

### a) The First 10km Section

Item	DESCRIPTION	Man Month
1	TEAM LEADER/ HIGHWAY DESIGN ENGINEER	There will be only one T/L for both sections
1	MATERIALS / PAVEMENT ENGINEER	3
2	STRUCTURAL ENGINEER	1
3	HYDROLOGIST	1.5
4	CONTRACT DOCUMENT SPECIALIST	1.5
5	TRANSPORT ECONOMIST	1.5
6	ENVIRONMENTAL AND SOCIAL EXPERT	1.5
7	ENGINEERING SURVEYOR	1.5
	<b>TOTAL MAN MONTHS</b>	<b>11.5</b>

### b) The rest of the road section

Item	DESCRIPTION	Man Month
1	TEAM LEADER/ HIGHWAY DESIGN ENGINEER	8.5
2	MATERIALS / PAVEMENT ENGINEER	6
3	STRUCTURAL ENGINEER	4
4	HYDROLOGIST	2
5	CONTRACT DOCUMENT SPECIALIST	4
6	TRANSPORT ECONOMIST	4

7	ENVIRONMENTAL AND SOCIAL EXPERT	4
8	ENGINEERING SURVEYOR	5

The Consultant's personnel, nominated for this project, shall be suitably qualified and experienced. As a guide, the following is an indication of the minimum level of training and experience expected of the key members of the design team:

- (a) Highway Design Engineer/Team Leader: with a minimum qualification of B.Sc. in Civil Engineering, professionally qualified, and must have at least 15 years of working experience in road works, and should have undertaken at least 10 feasibility study and detailed design projects as a Highway Design Engineer.
- (b) Materials Engineer: with a minimum qualification of B.Sc. in Civil Engineering, professionally qualified, and must have at least 10 years of working experience in road works, and should have undertaken at least 6 feasibility study and detailed design projects as a Materials Engineer.
- (c) Structural/Bridge Engineer: with a minimum qualification of B.Sc. in Civil or Structural Engineering, professionally qualified, and must have at least 10 years of working experience in road works and structures, and should have undertaken at least 6 feasibility study and detailed design projects as a Bridge Engineer
- (d) Hydrologist: with a minimum qualification of B.Sc. in Civil Engineering or relevant discipline and must have at least 8 years' experience in road works and structures, and should have undertaken at least 6 feasibility study and detailed design projects as a Hydrologist.
- (e) Contract Documentation Specialist: with a minimum qualification of B.Sc. in Civil or relevant Discipline, and must have at least 10 years of working experience in preparation of bidding document for road works, and should have undertaken at least 6 feasibility study and detailed design projects as a Contract Document Specialist. Demonstrable experience in the use of SATCC standards and specifications as well as FIDIC Conditions of Contract.
- (f) Transport Economist: with a minimum qualification of a Degree in Economics and must have at least 8 years of working experience in road works or transport infrastructure. Experience in economic appraisals of road projects using the HDM-IV economic model is obligatory. The Transport Economist should have undertaken at least 5 feasibility study and detailed design projects as a Transport Economist.
- (g) Environmental and Social Expert: with a Bsc. in Environmental Science and Technology or its equivalent and must have 8 years of working

experience, and should have undertaken at least 5 feasibility study and detailed design projects as an Environmental and Social Expert.

- (h) Engineering Surveyor: Professionally qualified technician with Diploma in Civil Engineering or Engineering Surveying and should have 8 years of work experience, and should have undertaken at least 5 feasibility study and detailed design projects as an Engineering Surveyor.

## 6.0 Timing

The Consultant shall draw up his own proposal for a time schedule, but shall make due allowance for time required by the Authority to assess and approve documents submitted by the Consultant, before subsequent project tasks can be commenced with. The following schedule is to be used as a guide:

- a) The first 10 km section

Report No.	Report Description	Delivery Duration
i	Draft Feasibility Study Report Submission	3 weeks after Commencement Date
ii	Comments on Draft Feasibility Report by RA	1.5 weeks
vi	Implementation of RA Comments	1.5 weeks
vii	Final Feasibility Study Report Submission	6 weeks after Commencement Date
viii	Comments on Final Feasibility Report by RA	1.5 weeks
ix	Implementation of RA Comments	1.5 weeks
x	Draft Detailed Design Report Submission	13 weeks after Commencement Date
xi	Comments on Draft Detailed Design Report	1.5 weeks
xii	Implementation of RA Comments	1.5 weeks
xiii	Final Detailed Design Report Submission	16 weeks after Commencement Date

- b) The rest of the road section

Report No.	Report Description	Delivery Duration
i	Inception Report	4 weeks after Commencement Date
ii	Comments on Inception Report by RA	2 weeks
iii	Implementation of RA Comments	2 weeks
iv	Draft Feasibility Study Report Submission	12 weeks after Commencement Date
V	Comments on Draft Feasibility Report by RA	3 weeks
Vi	Implementation of RA Comments	3 weeks
Vii	Final Feasibility Study Report Submission	18 weeks after Commencement Date
Viii	Comments on Final Feasibility Report by RA	2 weeks
Ix	Implementation of RA Comments	2 weeks
X	Draft Detailed Design Report Submission	28 weeks after Commencement Date
Xi	Comments on Draft Detailed Design Report	3 weeks
Xii	Implementation of RA Comments	3 weeks
Xiii	Final Detailed Design Report Submission	34 weeks after Commencement Date

The feasibility study phase and the detailed engineering design phases are expected to be completed not later than four months for the first 10km and eight and half (8.5) months for the rest of the road section, respectively, including time for comments and approvals by the Roads Authority and other key stakeholders.

## 7.0 Reporting Requirements

- a) The first 10km Section  
The submission of Reports will follow the requirements as detailed in section 7.1 (b) below except for the timelimes, which will be according to Section 6.0 (a) above. The Inception Report will not be required for this section.
  
- b) The rest of the Road Section

The Consultant shall prepare and submit the following reports and documents, in English, in an approved format to the Client. The comments of the Client shall be incorporated in the final version of the reports and documentation.

Ten (10) hard copies and one (1) soft copy of each of the reports/documents listed below shall be sent to the Client.

In addition, thirteen (13) sets of the final bidding documents in hard copy and one set in electronic copy, shall also be provided. Six sets of drawings shall be provided with A1 size drawings and thirteen (13) sets with A3 size drawings.

## **7.1 Phase I: Feasibility Study with Preliminary Engineering Design**

### **(a) Draft Feasibility Study Report**

The Consultant shall submit a draft feasibility study report within 12 weeks from the date of commencement of the study as outlined under Section 7. The following volumes have to be included:

- **Draft Economic Feasibility Report**

The Draft Economic Feasibility Report should attempt to comment and discuss all the elements of the entire Economic Feasibility study including the economic calculations and analysis carried out and showing detailed results of the economic feasibility under this stage, covering all the required elements included under Section 4.1.2.

- **Draft Preliminary Engineering Design Report**

A draft Preliminary Engineering Design Report covering all the elements included under Section 4.1. Shall be submitted the report shall include details of the services carried out and the outcomes of the preliminary design with emphasis on soils and material investigation results, preliminary designs and cost estimates. The Report should attempt to comment and discuss all the elements of the entire Preliminary Design study over and above the preliminary design issues and processes.

The report shall include the findings of the preliminary designs and cost estimates, planning requirements of the socio-economic and environment impact assessments. It shall include an executive summary, summarizing all the findings and recommendations. This report will be presented including survey data, drawings, maps, plans and diagrams in A3 size to be included in the Final Report.

- **Draft Environmental and Social Impact Assessment Report**

The draft Environmental and Social Impact Assessment Report shall be prepared in accordance with the Guidelines for an Environmental Impact

Assessment of Proposed Road Works which are appended as Appendix No.5,8 and 9. The report shall also include cost estimates and STD & HIV and AIDs and other pandemic components. Fifteen copies of the report shall be submitted for scrutiny to the Advisory Committee on Environment and Social Assessment (ACESA) and for approval by the Board of Malawi Environment Protection Authority. This report shall be submitted together with the draft feasibility study at the end of 12 weeks from the commencement of the services.

- **Draft Full or Abbreviated Resettlement Action Plan**

The draft full or abbreviated Resettlement Action Plan (RAP) shall be prepared in accordance with Appendix 6 or 7 of these Terms of Reference whichever is applicable. The RAP should address all typical issues as outlined under Appendix 6 of these Terms of Reference. This report shall be submitted together with the draft feasibility study at the end of 12 weeks from the commencement of the services.

**(b) Final Feasibility Study Report**

After taking into account the Client's comments on the draft feasibility study report including the draft Economic Feasibility and Preliminary Design Report, the Environmental and Social Impact Assessment Statement and the Resettlement Action Plan, the Consultant shall prepare and submit the final feasibility study report complete with plans and all documents. This report will be presented including survey data, soils and material investigation results, required drawings, maps, plans and diagrams in A3 size. This report shall be submitted within 2 weeks of receipt of the Clients comments

## **7.2 Phase II: Detailed Engineering Design**

Under phase II of the assignment, the Consultant shall submit the following reports;

**(a) Draft Detailed Design Report and Bidding Documents**

The consultant shall submit a draft detailed engineering design report including soil and material investigation and pavement design report complete with cost estimates and accompanied by a set of the draft bidding documents and all drawings, maps, plans and diagrams in A1 size. For major structures, the consultant will submit all the calculations for the design as an appendix to the report. The bidding documents shall be in accordance with the latest version of the Roads Authority standard bidding documents. This report has to be submitted after 28 weeks from the date of commencement of the study.

**(b) Final Detailed Engineering Design Report**

After approval of the draft detailed design report, the consultant shall submit the final report with a set of bidding documents, acceptable to the Client and the Financiers. The drawings that will form part of the bidding documents shall be in A1 size as well as reduced to A3 size. Thirteen (13) sets of the final bidding documents in hard copy and one set in electronic copy (in pdf and editable format), shall be provided. Also six sets of drawings shall be provided with A1 size drawings and thirteen (13) sets with A3 size drawings.

This report shall be submitted within 3 weeks after receipt of the client's comments. The consultant will also be required to submit an electronic copy (USB flash drive) of the Final Detailed Design Report and bidding documents.

Note: The consultant shall make a presentation of the preliminary design report and draft detailed design report to the Roads Authority and other relevant stakeholders at a meeting to be arranged in consultation with the Roads Authority. The presentation for the draft detailed design report shall be preceded by a joint site visit with the Client.

## **8.0 Data, Services and Facilities to be Provided by the Client**

The Client shall provide the consultant with all requested and available data.

The Client will also assist in the facilitation for the co-operation of other government ministries and agencies, departments and other agencies as required for carrying out the works and in liaison as necessary for the same purpose. The Client will give the Consultant assistance to gain access to all information required for the proper conduct and completion of the studies.

## **9.0 Obligations of the Consultant**

The consultant's obligations shall include, but not be limited to the following:-

- i. The Consultant shall employ well qualified and competent professional staff at all times in the execution of this study.
- ii. The Consultant shall make his own arrangements for all necessary office and living accommodations, transportation, office and other supplies, computers, computer software, survey equipment, engineering investigations, materials testing, printing of reports and drawings etc. in connection with the services to be provided. All costs have to be included in the Financial Proposal.

- iii. Prior to commencement of the actual services, the Consultant shall formulate a quality management system and procedures for implementation of these services in accordance with these Terms of Reference and accepted professional practice.

## 10.0 Payment Schedule

The services will be executed on a Lump Sum Contract basis and the payment schedule shall be as follows:-

- a) The first 10km section and the rest of the road section
  - 30% of the Contract Price shall be paid on submission and acceptance by the client of the Draft Economic Feasibility and Preliminary Design Reports.
  - 20% of the Contract Price shall be paid on submission and acceptance by the client of the Final Economic Feasibility and Preliminary Design Reports.
  - 30% of the Contract Price shall be paid on submission and acceptance by the client of the Draft Detailed Design Report.
  - 20% of the Contract Price shall be paid on submission and acceptance by the client of the Final Detailed Engineering Design Report.
  
- b) The rest of the Road Section
  - 10% of the Contract Price shall be paid on submission and acceptance by the client of the Inception Report.
  - 30% of the Contract Price shall be paid on submission and acceptance by the client of the draft Economic Feasibility and Preliminary Design Reports.
  - 10% of the Contract Price shall be paid on submission and acceptance by the client of the Final Economic Feasibility and Preliminary Design Reports.
  - 30% of the Contract Price shall be paid on submission and acceptance by the client of the Draft Detailed Design Report.
  - 20% of the Contract Price shall be paid on submission and acceptance by the client of the Final Detailed Engineering Design Report.

Note: The consultant shall price the additional services under item 4.2.10 separately, and for this services the payment schedule shall be as follows:



**a) Mentoring of graduate Engineers**

- 50% of the Cost on submission and acceptance of the Training Report at Draft Feasibility study reporting stage.
- 50% of the Cost on submission and acceptance of the Training Report at Draft Detailed Design reporting stage.

**b) Training of Clients staff**

- A provisional sum, where training is applicable, has been included in the financial proposal against which all training expenses will be paid on submission of receipts.

**11.0 PRECONDITIONS FOR CONSULTANCY SERVICES OF PHASE 3**

**Note: Award of Phase 3 is subject to satisfactory performance of Phase 1 and 2**

Commencement of Phase III shall depend on availability of funds for the Road Construction Works

**EITHER**

The Roads Authority reserves its rights to retender the Consultancy Services for site supervision of this project if the period between submission of the Final Design Report and Tender Advertisement for contractors' road construction works is longer than one calendar year (365 days).

**OR**

If the period between submission of the Final Design Report and Tender Advertisement for contractors' road construction works is longer than one calendar year (365 days) then the Roads Authority will pay an inflation factor as determined by the Malawian Statistical Office to be applied to the site supervision costs of the consultant whose effect shall come into force from the date of submission of the Final Design Report.

## **Phase III – Site Supervision**

This phase of the assignment will be the subject of a Time Based Contract.

**12.0 PHASE 3 (CONSTRUCTION SUPERVISION) - SCOPE OF CONSULTING SERVICES****12.1 General Requirements**

- (a) The Consultant's supervision teams shall work in close co-operation with the Roads Authority. The team is to operate from the consultant's offices on site.

- (b) The Road Authority will provide all relevant construction works information available. Interpretation of such information will, however, be the sole responsibility of the Consultant. Any additional data required will be collected by the consultant.
- (c) Accommodation of the Consultants site teams will be the responsibility of the Consultant.
- (d) The provision of support staff and transport for the Consultant inclusive of fuel and drivers will also be the responsibility of the Consultant.
- (e) The consultant shall be responsible for providing office space and facilities, accommodation, transport and support staff for the supervision teams for the period of the services.
- (f) The Roads Authority will provide through the works contract, laboratory and survey facilities for use by the consultant.
- (g) Preparation of minor designs that may be required can be covered by using standard drawings available from the Road Authority. Where standard drawings are not available for a particular item, the Consultant is to prepare such drawings with approval from RA.

## **12.2 Administrative/Technical Tasks**

The Consultant shall use FIDIC Red Book conditions of contract 2017 and SATCC Standard Specifications for Road and Bridges Works (1998) on this project. The consultant will perform all the duties and responsibilities of the Engineer as they are described in FIDIC Red book.

### **12.2.1 Consultant's Representative on Site**

The Consultant shall undertake full time supervision and contract administration during the construction works and shall provide the full- time supervision team described below:

- (i) Resident Engineer
- (ii) Materials Engineer
- (iii) Measurement Engineer
- (iv) Bridge Engineer
- (v) Environmental Expert
- (vi) Occupational Health and Safety Expert
- (vii) Social Expert
- (viii) Engineering Surveyor
- (ix) Materials Technicians
- (x) Inspectors of Works

### **12.2.2 Contract Preliminaries and General**

- (a) The Resident Engineer shall review the qualifications of the proposed key site management personnel of the Contractor and make appropriate recommendations to the Client;
- (b) The Resident Engineer shall receive from the Contractor, check for compliance with Contract requirements, approve and forward all performance bonds, insurance certificates, policies and guarantees to the Client for acceptance.

- (c) During the mobilization of contractor's equipment, camp and personnel, the Resident Engineer shall monitor the contractor's progress against the approved program.
- (d) The Resident Engineer shall prepare and compile detailed works specific forms and check lists relevant to the nature of works. These shall be used and maintained by the inspectors for monitoring work activities. These forms shall be available for inspection by the Client at all times.

### **12.2.3 Work Programme**

- (a) The Resident Engineer shall review the program submitted by the Contractor for the execution of the Works to establish whether the methods, arrangements, order and timing of the activities are realistic and coherent in relation to the conditions pertaining on Site.
- (b) The Resident Engineer shall identify from the approved program the information needed by the Contractor for the execution of the works and ensure that such information is made available to the Contractor in a timely manner. The requirement for detailed drawings and information related to the works should be given adequate consideration.

### **12.2.4 Quality Assurance Management**

- (a) The Resident Engineer shall review and approve the Quality Assurance and Quality Control Procedures submitted by the Contractor.
- (b) The Resident Engineer shall ensure that all material tests results are kept secure preferably backed by a cloud-based data repository for future retrieval and use.

### **12.2.5 Review of Work, Rejection of Defective Work and Tests**

The Resident Engineer using the resources of the supervision Teams shall:

- (a) Conduct on-site observation of the work in progress to determine if the works are proceeding in accordance with the contract schedule, and that the completed works conforms to the contract's technical specifications;
- (b) Carry out quality control of construction materials through testing on site or in the laboratory, for compliance with the relevant clauses in the technical specifications in line with the agreed Quality Assurance and Quality Control procedures. Soils and materials testing records shall be kept on site, with comments in the monthly report. The onus for all testing and control rests entirely on the Consultant.
- (c) Verify that selection and use of materials is in accordance with the design specifications. Establish procedures, criteria, and testing methods to verify the quality of the materials;
- (d) Inform the Contractor when work is to be corrected or rejected or to be uncovered for observation, or special testing, inspection or approval and ensure that defective work is properly corrected in a timely manner;
- (e) Suggest or review and approve substitute materials when necessary. Estimate the cost of such materials and make appropriate adjustments in the specifications in consultation with the Client.

- (f) Inspect and test the works including testing of materials for incorporation in the works and ensure compliance with the relevant clauses in the Technical Specifications. Soils and materials testing records shall be kept on site, with comments in the monthly report.
- (g) Advise the Contractor of the necessity for special inspection and testing of materials and plant to be supplied for incorporation in special maintenance requirements.
- (h) Receive, review and approve or recommend revisions as necessary the Contractors Traffic Management Plan and monitor that once approved this is implemented as proposed.
- (i) The Consultant is to monitor all aspects of health and safety during the execution of the works and ensure that the relevant regulations and requirements are complied with by the Contractor
- (j) The Consultant is to report on all incidents or accidents on the site of the works or associated with the implementation of the works and liaise as necessary with the local authorities and/or police and promptly provide the client with copies of such reports
- (k) Accompany visiting Inspectors representing public or other agencies having jurisdiction over the project, and record the outcomes of these inspections and report as appropriate
- (l) Ensure the contractor's compliance to all Environmental and social safeguards as contained in the Contractors' Environmental and Social Management Plan (C-ESMP), Stakeholder Engagement Plan (SEP) and Labour Management Procedures (LMP)
- (m) Oversee the implementation of the Grievance Redress Mechanism (GRM) for both community and workers by the contractor and/or sub-contractors at project implementation level.

### 12.2.6 Interpretation of Contract Documents

The Resident Engineer shall:

- (a) Maintain liaison with contractor, working principally through the contractor's senior personnel and assist them as necessary in understanding the intent of the contract documents.
- (b) Issue in good time additional details and drawings necessary for the proper execution of the contract;
- (c) Provide interpretations necessary for the proper execution and progress of work, with reasonable promptness and in accordance with agreed time limits;
- (d) Provide written recommendations within a reasonable time, on all claims, disputes and other matters in question relating to the execution or progress of work or the interpretation of the contract documents.
- (e) Instruct the contractor to immediately stop in the event that an activity commences before the contractor has made appropriate submissions and obtained necessary approvals.
- (f) Issue written instructions to the contractor as required.
- (g) Recommend suspension of work when the contractor consistently fails to comply with instructions or to perform the work in accordance with the contract, and recommend appropriate action.

### **12.2.7 Claims Control**

The Resident Engineer shall:

- (a) Conduct regular meetings with the Contractor to identify issues of design, technical and commercial challenges that may give rise to delays or claims. Ensure that measures are put in place to address these.
- (b) Ensure that the Client is kept fully informed of all issues that the consultant believes may result in claims.
- (c) Identify any correspondence from the Contractor that may be construed as early warning of a claim and ensure proper record keeping is in place to monitor the issue.
- (d) Review the Contractor's 'early warnings' submissions and claim submissions and make recommendations in accordance with the requirements of the Contract.

### **12.2.8 Modifications of Contract**

The Resident Engineer shall:

- (a) Consider and evaluate the Contractor's suggestions for modifications in drawing or specifications and report them to the Client with recommendations;
- (b) Examine Contractor's proposals for variations and provide recommendations to the Client for approval when changes affect cost or quality. Changes, which do not affect cost or quality may be approved on-site and recorded in the monthly progress reports. Such changes shall be effected by written orders issued by the Consultant; and
- (c) Prepare any further design and drawings necessary for the information of the Contractor to enable him to carry out the Works. In particular, the Consultant shall issue all instructions related to the works for which the Contract contains only provisional items.

### **12.2.9 Surveying, Setting Out and Measurements (where applicable)**

The Resident Engineer using the resources of the supervision team shall:

- (a) Hand-over to the contractor all survey control points (including location and survey data) established during the design stage and where necessary re-establish any points that have been lost or disturbed.
- (b) Check all alignment and elevation control points provided to the Contractor;
- (c) Check all setting out of the works undertaken by the Contractor; and
- (d) Compile necessary field measurements and calculate quantities of materials incorporated in the works.
- (e) Check the setting out of the alignment and elevations and maintain the corresponding documentation. Continuous control of pavement levels, culvert levels and levels of any other structures
- (f) Maintain a record of all survey works and measurements;

### **12.2.10 Measurement of Works**

The Resident Engineer through the Measurement Engineer shall:

- (a) Carry out measurement of the works certified as complete on site together with the Surveyor to be used in checking contractor's payment and progress claims; and
- (b) Maintain a record of measured works on site.

#### **12.2.11 Payment Certificates**

The Resident Engineer with assistance of the Measurement Engineer shall review monthly interim payment applications submitted by the Contractor in accordance with the conditions of contract and the Resident Engineer shall review and certify these for payment or return them to the Contractor for revision. Upon certification the Resident Engineer will forward five copies of the approved payment certificates plus all supporting measurements sheets and supporting documentation within two weeks of receipt from the Contractor to the Client, who will forward these for payment to the Road Fund Administration.

The interim payment certificates shall detail the actual quantities of work items completed to date compared with the total billed quantity for each item together with the contract unit rates for each work item, materials on site, details of Dayworks, price adjustments, any other payments to which the Contractor may be entitled to under the contract, and deductions for retentions and advance repayments.

Any matters of dispute on the extent of payments shall be resolved between the Resident Engineer and the Client and any agreed adjustments shall be communicated to the Contractor by the Resident Engineer and included as adjustments in the subsequent month's certification.

#### **12.2.12 Keeping Records**

The Resident Engineer shall:

- (a) Maintain at the project office files for correspondence, reports, minutes of meetings, product and material submissions, additional drawings issued subsequent to the execution of the Contract, as well as Consultant's clarifications and interpretations of the documents, progress reports and other related documents;
- (b) Keep a diary or log book, recording Contractor's staff hours on job site, equipment availability/ operation, weather conditions, data relative to questions of extras or deductions, list of visiting officials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures;
- (c) Keep a register of all early warnings and claims including justifications, determinations and adjudications of the same; and
- (d) Maintain a set of drawings (As-built drawings) recording all details of the work as actually executed.

#### **12.2.13 Monthly Progress Meetings**

The Resident Engineer shall:

- (a) Arrange monthly progress meetings with site inspections and notify those expected to attend. In arranging these meetings, he is expected to circulate

the meeting agenda and to subsequently maintain and circulate minutes thereof;

- (b) Prepare monthly progress reports recording the contractor's and the consultant's activities, physical and financial progress in relation to the contractor's program, quality of materials and workmanship, and comment on any unusual occurrences. Eight copies of the reports are to be submitted to the Client within 10 days following the month reported.

#### **12.2.14 Health, Safety, Social and Environmental Management**

The Resident Engineer shall ensure that the Contractor delivers its ES obligations under its contract. This includes, but is not limited to the following:

- (a) Review the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 6 months);
- (b) Review all other applicable contractor's documents related to ES aspects including the health and safety manual, security management plan and SEA prevention and response action plan;
- (c) Review and consider the ES risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;
- (d) Undertake, as required, audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities under its contract, to verify the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH);
- (e) Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other ES related documentation, as necessary, to confirm the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH);
- (f) Determine remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ES obligations, refer to Annex 6;
- (g) Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations;
- (h) Ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
- (i) Review and critique, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;
- (j) Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ES issues;
- (k) Establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of SEA and/or SH.
- (l) Carry-out the following activities consistent with the Works contract to be supervised, including but not limited to the following:

- (i) Support the Works employer to organize an SEA/SH conference, ensure appropriate representation in the conference and follow-up on any agreed actions by the attendees;
  - (ii) Monitor contractor's compliance with its SEA/SH Prevention and Response Obligations in the Works contract, and take appropriate contractual actions if non-compliance is identified, including upon identification of potential non-compliance by a dispute board;
  - (iii) Ensure that any allegation of SEA and/or SH that are received by the Consultant are documented, maintaining appropriate confidentiality, and promptly submitted to the Employer and the Contractor;
  - (iv) Prior to its engagement for the Works, verify that, any proposed subcontractor not named in the contract, is qualified in accordance with the provisions of the SEA/SH performance declaration for sub-contractors;
  - (v) Provide appropriate support and relevant documents that a dispute board may need in reviewing SEA/SH contractual compliance;
- 
- (m) Ensure that the contractor complies with all national labour, Environment, Social, Occupational Health and Safety rules and requirements of the contract documents as per the local legal and regulatory requirements, and project requirements;
  - (n) Ensure that all contractor's staff are properly equipped with personal protective equipment;
  - (o) Ensure that the contractor carries sufficient training of their personnel to ensure a safe working environment;
  - (p) Ensure that any accidents are properly reported within 24 – 48 hours after occurrence and that investigations on the causes are carried out so that preventative measures are put in place to prevent recurrence;
  - (q) Monitor the contractor's implementation of their traffic management plan to ensure safety of road users including pedestrians and non-motorized traffic during the rehabilitation works;
  - (r) Ensure that the contractor has appointed all safety personnel required by the contract documents, trained them and set up systems to allow them to function properly;
  - (s) Conduct regular safety meetings with the Contractor's nominated health and safety officers;
  - (t) Ensure that an HIV and AIDS awareness program is implemented in accordance with the requirements of the works contract;
  - (u) Monitor HIV and AIDS awareness activities to ensure that the program is being implemented as required by the works contract;
  - (v) Ensure that Contractor prepares Standard Operating Procedures (SOPs) for each work site and that these are translated in a language understandable by local workforce and are displayed in visible and accessible locations within worksites;
  - (w) Ensure that the Stakeholder Engagement Plan (SEP) and Labour Management Procedures (LMP) are implemented by the contractor;
  - (x) Report on environmental and social compliance in the Monthly Progress Report.
  - (y) Refer to Annex 7 for a detailed description of monitoring the implementation of RAP and ESHS Management Strategies and Implementation Plans (ESHS-MSIP)



### **12.2.15 Financial Progress Monitoring**

The Resident Engineer shall:

- (a) Ensure that the Contractor provides monthly cash flow updates in accordance with the works contract;
- (b) Monitor actual cash flows against programme;
- (c) Maintain a "Final Job estimate" which shall be published at least once per quarter and shall contain the base estimate of the final job cost taking into account changes in quantities, variation orders, and claims.

### **12.2.16 Completion of Works**

The Resident Engineer shall:

- (a) Inspect the works in the company of representatives of the Client, the Contractor and the Sub-contractor, if any, prior to handing over of any section of the works;
- (b) Prepare a final snag list of items to be completed or replaced together with a time schedule for remedying of the same;
- (c) Verify that all items on the final snag list have been completed or corrected; and
- (d) Prior to the commencement of the Defects Notification Period for any section, provide written affirmation that the works have been completed in accordance with the requirements of the contract, plans and specifications, and issue a Taking-Over Certificate.
- (e) The Consultant shall maintain and keep updated a set of 'As-Built Drawings'. The As-Built drawings shall be finalized for submission with the final report before the end of the Defects Notification Period
- (f) The Consultant shall ensure that all Environmental and Social issues and grievances are closed as per the project's ESMP and the approved Contractor ESMP (C-ESMP)

### **12.2.17 Required Input During Defects Notification Period**

- (a) Immediately prior to the expiration of the Defects Notification Period for any section of the works for which a Taking-Over Certificate has been issued, the Resident Engineer shall in the company of the Client, and the Contractor inspect the said section and provide written affirmation that the works have been completed and maintained in accordance with the contract, and issue a Maintenance Certificate for the relevant section subject to the approval of the client.
- (b) Upon receipt from the Contractor within 56 days of the issue of the Maintenance Certificate for the last section for which the defects notification period has expired, the Resident Engineer shall prepare in co-operation with the Contractor the Final Account for the contract.

## **13.0 Contract Duration**

The duration for this phase is 15 months based on the anticipated duration of the works contract plus a Defects Notification Period of Twelve (12) months.

## 14.0 Team Composition

The following Key Experts will be required to carry out the Construction Supervision services. For each proposed expert, curriculum vitae of not more than Four (4) pages shall be submitted.

Item	Description	Person Month
	<b>A – Key Personnel</b>	
A	Resident Engineer (1 No)	20
B	Materials Engineer (1 No)	18
D	Measurement Engineer (1 No)	18
C	Bridge Engineer (1No)	18
D	Environmental Expert (1 No)	18
E	Occupational Health and Safety Expert (1 No)	18
F	Social Expert (1 No)	18
G	Engineering Surveyor (1 No)	18
	<b>SUB-TOTAL A</b>	<b>146</b>
	<b>B – Other Personnel</b>	
l	Materials Technician ( 1 No)	36
m	Inspector of Works - Structures (1 No)	18
m	Inspector of Works – Surfacing (1 No)	14
m	Inspector of Works – Earthworks (1 No)	18
m	Inspector of Works – Pavement (1 No)	18
	<b>SUB-TOTAL B</b>	<b>104</b>

The consultant's personnel, nominated for this project, shall be suitably qualified and experienced. As a guide, the following is an indication of the minimum level of training and experience expected of the key members of the Consultants supervision team:

### (a) Resident Engineer:

A professionally registered Civil Engineer with a minimum qualification of B.Sc. in Civil Engineering or the equivalent, with a minimum of 15 years' experience in road construction supervision works on at least five (5) projects of a similar size and nature in the Sub Saharan Africa.

### (b) Materials Engineer/ Pavement Engineer

A Materials Engineer with a minimum qualification of B.Sc. in Civil Engineering or equivalent with at least ten (10) years working experience in supervision of road works as a Materials/Pavement Engineer and documented experience in the capacity of Materials/Pavement Engineer on at least three (3) road projects of similar size and nature in the Region of Sub Saharan Africa

### (c) Measurement Engineer

An Measurement Engineer with a minimum qualification of a B.Sc. in Civil Engineering or quantity surveying or equivalent, and at least ten (10) years working experience in

supervision of road works as a Measurement Engineer with documented experience in the capacity of Measurement Engineer on at least three (3) road projects of similar size and nature in the Region of Sub Saharan Africa

**(d) Bridge Engineer**

A Bridge Engineer/ Structural Engineer with a minimum qualification of B.Sc. in Civil Engineering or equivalent, with at least ten (10) years of working experience in supervision of road works as a Bridge Engineer with documented experience in the capacity of Bridge Engineer on at least three (3) road projects of similar size and nature in the Region of Sub Saharan Africa

**(e) Environmental Expert**

A minimum qualification of a degree in a relevant discipline. 5 years' general related experience in the implementation of environmental management requirements and the monitoring and implementation of environmental requirements on at least three (3) construction projects.

**(f) Occupational Health and Safety Expert**

A minimum qualification of a degree in a relevant discipline and 5 years' general related experience in the implementation of occupational health and safety requirements on at least three (3) construction projects.

**(g) Social Expert**

A minimum qualification of a degree in a relevant discipline and 5 years' general related experience in the implementation of social management requirements and the monitoring and implementation of social and safety requirements on three (3) construction projects

**(h) Engineering Surveyor**

A registered Surveyor with relevant bodies, and a minimum qualification of a BSc in Surveying work and should have experience in setting out works and survey control and 5 years work experience on at least 2 projects of similar size and nature or a Diploma in Civil Engineering and 7 years in setting out and survey control with not less than documented experience in the capacity of Surveyor on at least four (4) road projects of similar size and nature in the Region of Sub Saharan Africa

**(i) Materials Technicians**

A minimum qualification of either a BSc Degree in Civil Engineering and 2 years' experience in materials testing on at least one road project of similar size and nature or a Diploma in Civil Engineering and 7 years' experience in materials testing on at least 4 road projects of similar size and nature in the Sub Saharan Africa Region.

**(j) Inspectors**

A minimum qualification of either a Diploma in Civil Engineering and 5 years' experience in a site capacity on at least 2 road projects of similar size and nature in the region or an NCIC Grade II Roads Foremanship Certificate or Ministry of Works

Certificate with at least 10 years work experience on at least 4 road projects of similar size and nature.

### **15.0 Reporting Requirements and Time Schedules for deliverables**

The following reports shall be submitted:

#### **15.1 Monthly Progress Reports:**

The Resident Engineer shall submit comprehensive monthly reports on the progress of the works, the Contractors' Performance Assessment Reports and Environmental Monitoring Forms by the 14th of the month following the month reported.

The Resident Engineer shall furnish the client with project progress photographs for each contract in soft copy together with the monthly reports.

Non-compliance with that requirement will attract a penalty. For each calendar day of delayed submission (after the tenth day of each month) a deduction of 0.25 % of the Consultant's monthly Invoice will be applied as penalty.

An example of the Monthly Progress Report which includes all the required information will be submitted to the Client (Roads Authority) at the beginning of the assignment for approval before using the template. A total of six (6) copies of the reports shall be submitted to Roads Authority during implementation phase for records and review.

#### **15.2 Minutes of Meetings:**

The Resident Engineer shall issue comprehensive minutes of regular (progress and technical) and special meetings and submit three copies to Roads Authority. Minutes of the regular meetings may be attached to the Monthly Progress Reports or, depending on the circumstances, may be submitted separately.

#### **15.3 Final Report:**

Within 28 days of the issuance of the Taking Over Certificate, the Resident Engineer shall prepare a Final Report, which shall highlight all major points of interest that arose during the Contract. The report will also include the summary of the type, quality, quantities and sources of materials used on the project; Contractor's plant and personnel; problems encountered and solutions employed; changes in design and specifications and the reasons therefore; a breakdown of the final cost item by item; a summary of variation orders and expenditures of provisional sums and contingency sums and As-built drawings) recording with all details.

#### **15.4 Accident Reports:**

A detailed report of the circumstances of accidents occurring on the site shall be forwarded to the Client in line with stipulations of the ESMP but not later than 1 month after occurrence of the accident. An incident report shall be issued within 24 hours of the occurrence of any accident notifying the Client of the accident.

### 15.5 ES reporting

The Consultant shall:

- (a) Immediately notify the Client of any failure by the Contractor to comply with its SEA and SH obligations;
- (b) Immediately notify the Client of any allegation, incident or accident, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Client's Personnel, Contractor's Personnel or Experts. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information. The Consultant shall provide full details of such incidents or accidents to the Client within the timeframe agreed with the Client.
- (c) Immediately inform and share with the Client notifications on ES incidents or accidents provided to the Consultant by the Contractor, and as required of the Contractor as part of the Progress Reporting;
- (d) Share with the Client in a timely manner the Contractor's ES metrics, as required of the Contractor as part of the Progress Reports.

All reports shall be submitted to:

The Chief Executive Officer of the Roads Authority, Roads Authority, Functional Building, Off Paul Kagame Highway, Private Bag B346, Lilongwe, Malawi.

### 16.0 Assistance To The Consultant By The Contracting Authority

The Contracting Authority will make available the following information and support to the consultant:

- (i) Introduction letters to facilitate the access of the consultants' staff to Ministries, Government administrations, public organizations, authorities and agencies, etc. whose activities and roles are relevant to the consultancy assignment.
- (ii) Senior Staff of the Roads Authority when necessary and relevant.

### 17.0 Workplan

On the basis of the activities outlined in the Terms of Reference, the consultants will prepare a work plan for the assignment and include this in their technical proposal as well as state the approach to be taken in carrying out the assignment. The work plan should set out the consultants' approach to the following activities.

- (a) Organization of the Project team and interrelations between the members of the team;
- (b) Description of tasks and duties of each member of the Project team
- (c) Mobilization of the Team and deployment of each expert;
- (d) Bar-charts displaying activities to be carried out on site, period of holidays of each expert indicative dates for short term missions of each expert, etc.;
- (e) Reporting

### 18.0 Start-Up Meeting

The successful Consultant shall attend, together with all their proposed supervision staff (i.e. Resident Engineer, Materials Engineer, Bridge Engineer and Measurement Engineer) a meeting with the Client to be held before the commencement of the

supervision services. The client or his representative shall elaborate the expected inputs and deliverables from each level of staffing. The client shall not be responsible for the costs incurred by the consultant in attending this meeting.

### **19.0 Presence Of Site Supervision Staff On Site**

In order, to satisfactorily perform the tasks it is a requirement that the all site supervision staff are present on site at all times while the works are in progress.

### **20.0 Leave, Resignations, Transfers And Replacements**

The Consultant's staff shall arrange their annual leave to coincide with the Contractor's annual recess. Should a staff member however be granted special leave outside the Contractor's annual close-down, the Consultant shall provide at no additional cost to the Employer an equally qualified person to stand in for the period that the permanent site staff member is on special leave.

The special leave of a permanent site staff member as well as the person relieving a permanent site staff member shall be approved by the Client prior to such leave being taken. The Consultant shall not transfer any staff without prior written permission of the Client and shall replace personnel, if deemed necessary by the Client and fill vacancies which are created for whatever reason, e.g. resignation, illness, non-performance etc., at no additional costs to the Employer, with equally or better qualified persons approved by the Client.

The remuneration to be paid for any of the Personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced. In case of lesser qualifications and working experience, the client shall have either the right to reject the proposed replacement or to negotiate reduced remuneration.

### **21.0 Facilities To Be Provided By The Consultant**

The Consultant shall be responsible for the provision of all facilities required to undertake the efficient and effective site supervision of road works with the exception of laboratory and survey facilities which will be provided through the works contract.

With respect to transport, the consultant shall provide five (5) motor vehicles for the supervision of the works and the measurement unit for the transport shall be "vehicle-months".

### **22.0 Contact Person**

- (a) The Consultant's liaison person shall be the Resident Engineer and as necessary the stated representative of the Consultants firm in the Head or Regional Office;
- (b) The Clients liaison person on this project shall be the designated Project Coordinator in the Roads Authority.

**23.0 Payments**

Phase 3 Payment for site supervision services shall be on time-based basis i.e. monthly and shall depend on the actual time inputs of the various staff on site supported by time sheets confirmed by the Resident Engineer and countersigned by the Clients representative

















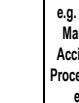
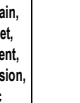


**ANNEX 1. DATA COLLECTION SHEET FOR CLASSIFIED MANUAL TRAFFIC COUNT**

**TRAFFIC COUNT FORM**

**MANUAL CLASSIFIED TRAFFIC COUNTS**

Name of the Road (Start & End Description)		Link. No:	Road No: _____	Date	Day	Weather		GPS Reference
Survey Location			Traffic Count Station No: _____	dd / mm / yy		Sunny	Cloudy	S
Nearest Town		Zone:	District Name : _____	Special Feature:		Rainy	Foggy	E
Any other Remarks:								

Time/ Direction		Motorized Traffic												Non-Motorized Traffic			Remarks		
		Passenger Vehicle							Goods Vehicle					Bicycle	Animal Drawn / Hand Cart	Others			
		Saloon car	Pickups LOW BASE	Landrovers, Landcruisers, Twin Cab 4 WD HIGH BASE	Two Wheeler (Motor Cycles)	Three Wheeler Tricycle	Mini-Bus (≤ 16 seats)	Medium Bus (>16 ≤50 Seats)	Large Bus (>50 Seats)	Light Truck, Trucks ≤ 3.0 ton	Medium Truck ( 2-Axle ), Trucks > 3.0 ≤ 16 ton	Heavy Truck ( 3-4 Axle ), Trucks > 16 tons	Semi-Trailer (ST)/ Full Trailer (FT) <b>Count Axle</b> (5,6,...)					Tractor or Tractor & Trailer	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Time	Dir.																	e.g. Rain, Market, Accident, Procession, etc	
04 - 05	To																		
	To																		
05 - 06	To																		
	To																		









## Annex 2 - OD Survey

Date:

Station:  
Interviewer:

Direction:

From:  
To:

### CODES

#### VEHICLE TYPE

1. Cars
2. Pickup/ 4WD
3. Light goods vehicle
4. Medium goods vehicle
5. Heavy goods vehicle
6. Minibus
7. Conventional bus
8. Tractors

#### TRIP PURPOSE

1. Home
2. School
3. Workplace
4. Shopping
5. Social
6. Serve passengers
7. Transporting goods
8. Other

#### LOAD TYPE

1. Construction materials
2. Agricultural
3. Food
4. Fuel
5. General
6. Passengers

#### VEHICLE LOADING

1. Loaded
2. Partially Loaded
3. Empty

#### ROAD CONDITION

1. Good
2. Fair
3. Poor

#### TRIP FREQUENCY

To be recorded as  
 number of trips per day or  
 number of trips per week or  
 number of trips per month

Time	Reg. No.	Vehicle Type	Number of People	Origin	Destination	Trip Purpose	Trip Frequency	Vehicle Loading	Load Type	Road Condition	Would use road if improved

### Annex 3 - Control Point Data Collection Template

Client	:			Project No.	:		
Coordinates							
Station ID	:	Type	Ground Control Points (GCP)				
Processing Level	Datum	Projection	Height Datum	Lat / Northing	Long / Easting	Height(m)	
Processed Geog	-	-	-	-	-	-	
Processed	-	-	-	-	-	-	
Processed	-	-	-	-	-	-	

**Comments:**



**Observation Details**

Date	-	<p>Sketch</p>	
Start Time (Local)	-		
End Time (Local)	-		
Slant Height (m)	-		
Vertical Height (m)	-		
Pillar Height (m)	-		
Antenna Offset (m)	-		
Pin Height (m)	-		
True Vertical H (m)	-		
Antenna Radii (m)			

GPS Unit Serial No.	-		File Name	N/A
GPS Model No.	-		Important Notes	
Antenna Type				
Misc				
Processing Software	-			

## Annex 4 - Topographic Survey

Relevance of Topographic Survey to project under review (Y or N)

*[NB This item cannot be effectively pursued until the proposed alignment has been determined. Hence, if there is a Feasibility Study stage involving alignment selection then the item cannot be commenced until the Feasibility Study has been completed, although Items 10.01 to 10.04 could be undertaken prior to that milestone]*

\*\*\*

The following checklists present an outline of the procedures to be followed in undertaking topographic survey for road projects.

\*\*\*

### Item 10.01 – Prepare Quality Assurance [QA] Plan for Topographic Survey

Relevance of this item to project under review (Y or N)

<b>CONFIRMATION:</b>	<b>Submitted:</b>
Prepare Draft QA Plan for Topographic Survey	

<b>ACTIVITY:</b>
The DCs [in collusion with their survey sub-contractor, if any] must prepare a QA Plan to describe how topographic survey will be organised and managed in a realistic way for implementation and achievement of the project objectives.

\*\*\*

The following checklist outlines the expected contents of the QA Plan. Other elements should be included as appropriate to the specific project.

Job brief	Relevant:	Included:
Sub-contract arrangements: Particular importance must be attached to mutual agreement of the QA Plan with any topographic sub-contractor in order to impart a feeling of ownership, and thereby promote compliance	Relevant:	Included:
Job team, roles, and responsibilities	Relevant:	Included:
Communications management	Relevant:	Included:
Data / document management	Relevant:	Included:



Coding system for survey features	Relevant:	Included:
Job methodology; including ensuring compliance with requisite accuracy specifications	Relevant:	Included:
Activity schedule	Relevant:	Included:
Resource schedule	Relevant:	Included:
Checking procedures	Relevant:	Included:
Preparation and submission of deliverables	Relevant:	Included:
Client / stakeholder review and responding to comments	Relevant:	Included:
Progress monitoring	Relevant:	Included:
<i>Other considerations:</i>		
•	Relevant:	Included:
•	Relevant:	Included:
•	Relevant:	Included:
•	Relevant:	Included:
•	Relevant:	Included:

\*\*\*

**Item 10.02 – Review of Draft QA Plan for Topographic Survey**

Relevance of this item to project under review (Y or N)

**CONFIRMATION:**

RA [and Donor(s), where applicable] comments on Draft QA Plan for Topographic Survey

Completed:

**ACTIVITY:**

There should be a defined period in the Services Contract which will commence immediately upon the submission of the Draft QA Plan for Topographic Survey during which period the RA and [where applicable] the Donor(s) perform a review of the draft plan and [where considered necessary] hold discussions with the DCs to clarify any points which require further explanation.

The comments arising from that review will be formally forwarded to the DCs.

\*\*\*

**Item 10.03 – Finalise QA Plan for Topographic Survey**

Relevance of this item to project under review (Y or N)

**CONFIRMATION:**

Final QA Plan for Topographic Survey

Submitted:

**ACTIVITY:**

The DCs will receive the official comments of the RA and Donor(s) [as applicable].

They will finalise and formally submit the QA Plan for Topographic Survey to incorporate the received comments or modification(s) of same following any subsequent discussion with RA for the purpose of clarification or debate.

\*\*\*

**Item 10.04 – Implementation of QA Plan for Topographic Survey**

Relevance of this item to project under review (Y or N)

**CONFIRMATION:**

Implementation of QA Plan for Topographic Survey

Confirmed:

**ACTIVITY:**

The implementation of the QA Plan for Topographic Survey must be an on-going obligation on the part of the DCs throughout the topographic survey work. The item can only be 'signed off' in the above 'Confirmation' box upon completion of all topographic survey work.

\*\*\*

**Item 10.05 – Establish Detailed Network of Survey Control Points**

Relevance of this item to project under review (Y or N)

**CONFIRMATION:**

Establish detailed network of survey control points

Completed:

**ACTIVITY:**

The DCs will utilise “state of the art” equipment for all survey and setting out works and to facilitate the ready transfer of digital survey data to the highway design / digital terrain model software.

The DCs must identify all existing triangulation beacons installed during previous studies [if such exist], and national survey monuments in the proximity of the project area, and install additional and / or replace existing damaged triangulation beacons, as necessary, to ensure adequate coverage of the project area. These must be of robust construction typically comprising steel pins set in concrete or alternatively set in holes drilled into solid immovable rock. The beacons will be located outside the area to be occupied by the permanent works, shall be mutually inter-visible, and at spacing and locations such that all secondary survey and setting out can be carried out from them. The beacons must be conspicuously marked at the site of each, and location diagrams must be prepared for each.

The network must be linked to the National Survey Grid, and benchmarks to the National Benchmarks system, where practicable. Where this cannot be practicably achieved a local triangulation and / or benchmark level system may alternatively be established. However, it is vital that such a systems be tied-in to carefully chosen, ‘indestructible’, and easily identifiable landmarks. These basic reference landmarks must not be susceptible to damage or movement by agricultural activity, erosion, flood, vandalism or any other such reasonably foreseeable threat. There must be a redundancy in the number of such basic reference landmarks so that, in the unlikely event of one or more actually being disturbed, there will be sufficient remaining to still enable restoration of the system. THIS IS VITALLY IMPORTANT.

The accuracy of observations for the x [easting], y [northing] coordinates must be within 10 mm + 1 part per million e.g for 2 points located 5 km apart:

Acceptable deviation = 10 mm + 1 ppm  
 Distance = 5 million mm  
 Error =  $10 + 1 \times 5,000,000/1,000,000 = 15$  mm

The accuracy for the z coordinate [elevation / reduced level] must be within  $5 \text{ mm} \times \sqrt{k}$  [where k is distance in km between successive beacons] e.g. for two points 5 km apart:

Error tolerance =  $5 \times \sqrt{5} = 11$  mm

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**Item 10.06 – Compile Detailed Digital Terrain Model**

Relevance of this item to project under review (Y or N)

**CONFIRMATION:**

Compile detailed digital terrain model

Completed:

**ACTIVITY:**

The DCs must carry out detailed secondary surveys using “state of the art” equipment. The surveyed strip width must be sufficient to accommodate all the envisaged design components plus a margin beyond so that the adjacent terrain configuration can, where relevant, influence the nature of the nearby works. This is especially important in respect of roadside drainage. As a general indication, the strip width should be about twice that of the nominal RoW width [but not less than 100m], to allow for full control of all designed elements within the RoW and also for moderate modifications in geometric alignment during fine detailing. Good judgment will be required with regard to the actual selected detailed survey width to reflect degree of complexity of the alignment geometrics, and also with regard to the need for additional coverage where dictated by special circumstances such as side roads realignment, frontage [service] roads and other access roads, intersections, slip roads and interchanges, grading and realignment of watercourses, and structures.

The DCs will record x [easting], y [northing], z [elevation] coordinates of all surface features. A coding system for all features should have been outlined in the QA plan.

Judgement will be necessary on the frequency of ground points surveyed to create the contour string lines based on the particular terrain but the intensity must be sufficient to accurately support 1/1000 scale mapping with a 1 metre contour interval for general design and 1/500 scale mapping with a 0.5 metre contour interval in special areas where a larger scale is required for clarity of presentation, eg for such locations as those outlined in the last sentence of the first paragraph of this ‘Activity’ box.

The actual features captured in the topographic survey work will vary from project to project, particularly between existing road rehabilitation and new road alignment, and these will require agreement prior to commencement of the survey work.

Tolerances for detail survey:

Feature	Tolerances [mm]	
	x and y	z
Structures, buildings, asphaltic pavements	± 50	± 25
Gravel pavements	± 100	± 50
All others	± 200	± 100

The following tabulation provides a comprehensive list of potential features for incorporation into the Digital Terrain Model [DTM] from which the actual features surveyed should be selected and agreed as per the requirements of the specific project. In the event of other features special to the project area, and not listed, they should be added in the blank spaces provided

National Survey trigonometric stations, with coordinates and all other details	Relevant:	Included:
Survey stations	Relevant:	Included:
Benchmarks, with coordinates and reduced level	Relevant:	Included:
Temporary benchmarks	Relevant:	Included:

Spot levels	Relevant:	Included:
Contours [normal, prominent]	Relevant:	Included:
North symbol	Relevant:	Included:
Earthworks (General)	Relevant:	Included:
Embankments / cuttings, bottom and top	Relevant:	Included:
Watercourses [natural rivers, streams], upper edges and bottom profile	Relevant:	Included:
Areas of crops, including various types	Relevant:	Included:
Areas of woodland, including types of trees	Relevant:	Included:
Grass [rough]	Relevant:	Included:
Scrub	Relevant:	Included:
Trees [small, medium, large]	Relevant:	Included:
Boundary strings	Relevant:	Included:
Centrelines	Relevant:	Included:
Road carriageways and edges	Relevant:	Included:

Kerbs	Relevant:	Included:
Roadway drainage gully	Relevant:	Included:
Shoulders	Relevant:	Included:
Verges, footpaths, and tracks	Relevant:	Included:
Road Signs [large, small]	Relevant:	Included:
Ditches, upper edges and bottom	Relevant:	Included:
Culverts	Relevant:	Included:
Drainage manhole / catchpit [type], with invert level and size of pipework	Relevant:	Included:
Railway track, with track profile [all lines] for [say] 50m each side of alignment	Relevant:	Included:
Buildings [frontage, general, solid-sided, open-sided, type of wall structure, type of roof]	Relevant:	Included:
Fences [various types]	Relevant:	Included:
Walls [low 0.1m - 0.5m, > 0.5m / various types]	Relevant:	Included:
Gates	Relevant:	Included:

Overhead electricity cables and pole positions, including voltage	Relevant:	Included:
Electricity box [pillar]	Relevant:	Included:
Electricity chamber, including depth to cables	Relevant:	Included:
Pylon locations, including voltage carried	Relevant:	Included:
Water supply chamber cover, including depth to pipe and pipe size	Relevant:	Included:
Water Meter	Relevant:	Included:
Stop Valve	Relevant:	Included:
Fire Hydrant	Relevant:	Included:
Overhead telecommunications cables, and pole positions	Relevant:	Included:
Telecommunications box [pillar]	Relevant:	Included:
Telecommunications chamber , including depth to top and bottom of cables	Relevant:	Included:
Retaining walls	Relevant:	Included:

Additional areas of survey at larger scale [see above 'Activity' box for this item] related to such special circumstances as: <ul style="list-style-type: none"> <li>• side roads realignment,</li> <li>• frontage [service] roads and other access roads,</li> <li>• intersections,</li> <li>• slip roads and interchanges,</li> <li>• grading and realignment of watercourses, and</li> <li>• structures.</li> </ul>	Relevant:	Included:
Text Strings	Relevant:	Included:
<i>Other features:</i>		
•	Included:	
•	Included:	
•	Included:	
•	Included:	
•	Included:	

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**Item 10.07 – Conduct Road Cross Section Survey**

Relevance of this item to project under review (Y or N)

Using appropriate road design software cross sections through the proposed road and ground profile can readily be obtained from the DTM. Hence, for projects where the ToR requires the preparation of a DTM it will not be necessary to undertake separate field survey to produce cross section information for the proposed road at specific chainage intervals.

However, for projects where a DTM is not called for, such as a simple road rehabilitation without geometric realignment, it may be more efficient and economical to undertake a cross section survey at suitable intervals sufficient to accurately depict the profile of the existing road.

<b>CONFIRMATION:</b>  Road cross section survey	Completed:
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**ACTIVITY:**

Where a road cross section survey is required as described above the typical cross section interval would be 20 metres but this may require adjustment from road section to road section depending on the severity of the existing road geometry or on such matters as extreme topography, urban areas, junctions, property accesses, nearby structures, specific drainage improvements etc.

Each cross section of an on-site cross section survey should extend over at least the full width of the RoW, and also any adjacent ditches or drainage channels [even outside the RoW] should be captured by the survey so that positive drainage can be designed for the location.

In the event of a project consisting of part new alignment and part simple rehabilitation the on-site cross section information will be included in the overall DTM.

Where existing roadside utility lines will be affected by a road rehabilitation project then their details must also be accurately recorded during the on-site cross section survey work, with the parameters recorded as described in the previous item for the preparation of a DTM.

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**Item 10.08 – Alignment and Right-of-Way Staking**

<b>CONFIRMATION:</b>	Relevant:	Included:
Alignment staked on site		

<b>CONFIRMATION:</b>	Relevant:	Included:
RoW boundaries staked on site [ with property update]		

**ACTIVITY:**

Alignment and RoW staking must be effected using robust markers with high visibility markings and the physical nature of the markers must be as approved by the RA.

In the case of a road rehabilitation project without realignment the existing RoW may remain largely unchanged and, accordingly, it may not be necessary to stake out the RoW boundaries.

Where the project requires new RoW boundaries to be established due to realignment of an existing road or for a new road alignment these must be staked out when their final details have been determined. This is an essential component in the assessment and evaluation of land acquisition and compensation. It should be noted that traditionally most roads have had a uniform RoW width generally related to the class of road involved, which greatly simplifies the process of staking out the boundaries. However, in some cases the more sophisticated roads of the present and future, with their attendant special features, such as side roads realignment, frontage [service] roads and other access roads, complex intersections, slip roads and interchanges, realignment of watercourses, and complex drainage outfall facilities will commonly require many localised additional areas beyond the nominal RoW width to accommodate those features.

Whilst the alignment should be staked out at the site as soon as it has been finalised, it is important not to stake out the RoW boundaries before the final land areas required in each location have been finally determined since modification and re-staking can cause distress to project-affected people who are required to lose land and property.

Where involuntary resettlement (physical and/or economic displacement) will arise the alignment and ROW staking much be coordinated with the resettlement and compensation action planning process. This is particularly important to avoid opportunistic settlers moving into the area, looking to benefit from compensation packages.

Concurrently with the staking process the DTM must be updated with any changes in property features, to facilitate the most accurate subsequent inventory of property loss due to the project.

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**Item 10.09 – Conduct Verification Survey Checks**

Relevance of this item to project under review (Y or N)

<b>CONFIRMATION:</b>	Confirmed:
Conduct verification survey checks	

**ACTIVITY:**

Checking procedures are vitally important to ensure the overall accuracy and professional standards of the topographic survey. These must include regular checking of instrument calibration, random independent checks to validate the three dimensional accuracy of survey points, and site reconnaissance to provide a visual appreciation of field conditions compared to the survey data.

Whilst this must be an on-going obligation on the part of the DCs throughout the topographic survey work the item can only be 'signed off' in the above 'Confirmation' box upon completion of all topographic survey work.

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**Item 10.10 – Prepare Draft Topographic Survey Report**

Relevance of this item to project under review (Y or N)

<b>CONFIRMATION:</b>	Submitted:
Draft Topographic Survey Report	

<p><b>ACTIVITY:</b></p> <p>The draft Topographic Survey Report will outline the methodology used by the DCs to carry out the primary control survey and detailed secondary surveys and must include the following deliverables.</p> <ul style="list-style-type: none"> <li>• Unedited digital files of all raw survey data for both the Primary Traverse and secondary surveys together with legible copies of any field books / notes.</li> <li>• Traverse layout drawing(s) and computations.</li> <li>• Correlation with the Malawian topographic Grid System, where appropriate.</li> <li>• The final x, y, z coordinates for all Control Points; point number, easting (x), northing (y), elevation (z).</li> <li>• Levelling computation sheets.</li> <li>• Monographs for each triangulation beacon comprising a brief description of the location, numeric photography, and triangulation data.</li> <li>• The complete DTM in electronic format.</li> <li>• Details of equipment calibration.</li> <li>• Staffing of the topographic survey work.</li> </ul> <p>The report and accompanying data must be prepared in a user-friendly manner for ease of reference subsequently by the construction contractor and construction supervising consultants during the construction stage.</p>
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**Item 10.11 – Review of Draft Topographic Survey Report**

Relevance of this item to project under review (Y or N)

<b>CONFIRMATION:</b>	Completed:
RA [and Donor(s), where applicable] comments on Draft Topographic Survey Report	

<p><b>ACTIVITY:</b></p> <p>There should be a defined period in the Services Contract which will commence immediately upon the submission of the Draft Topographic Survey Report during which period the RA and [where applicable] the Donor(s) perform a review of the report and [where considered necessary] hold discussions with the DCs to clarify any points which require further explanation.</p> <p>The comments arising from that review will be formally forwarded to the DCs.</p>
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**Item 10.12 – Finalise Topographic Survey Report**

Relevance of this item to project under review (Y or N)

<b>CONFIRMATION:</b>  Finalise Topographic Survey Report	Submitted:
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<b>ACTIVITY:</b>  The DCs will receive the official comments of the RA and Donor(s) [as applicable].  They will finalise and formally submit the Topographic Survey Report to incorporate the received comments or modification(s) of same following any subsequent discussion with RA for the purpose of clarification or debate.
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## **ANNEX 5**

### **GENERIC CONTENTS OF AN ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT REPORT**

The typical contents of an ESIA Report are presented hereafter. It shall be noted that the presentation of the report may be adapted depending on the nature and specific requirements of the project.

#### **Executive Summary**

This section shall present in a non-technical language a concise summary of the ESIA Report with a particular attention on the processes and procedures used, baseline conditions, alternatives considered, mitigation/enhancement measures, monitoring programme, consultations with stakeholders, capabilities of environmental and social units and actions to strengthen those capacities and associated cost implications. This Executive Summary shall be written in English and a local language, if necessary, for public consultations.

#### **Introduction**

The introduction shall indicate the purpose of the ESIA, present an overview of the proposed project to be assessed as well as the project's purpose and needs. This section identifies the project sponsor and the consultant assigned to carry out the ESIA. It shall also briefly mention the contents of the ESIA Report and the methods adopted to complete the assessment.

#### **Policy, Legal and Administrative Framework**

This chapter concerns the policy, legal and administrative framework within which the ESIA is carried out. It presents the relevant environmental and social policies of the country as well as the national legal requirements and related constraints (e.g. practices that may discriminate or exclude any stakeholder group) relevant to the project.

#### **Project Description and Justification**

The first part of this chapter shall describe the proposed project and its geographic, ecological, social, economic and temporal context, project location, various project components, capacity, construction activities, facilities, staffing, working conditions, availability and source of raw materials, production methods, products, schedule of works, land tenure, land use system, potential beneficiaries, affected groups (directly and indirectly) and offsite investments that may be required.

This section shall determine and characterise the anticipated liquid, solid and gaseous discharges from the processes as well as the sources of nuisance such as noise, odours, visual nuisances, etc. It shall indicate the need for any resettlement plan or

vulnerable groups' development plan. It shall at least include a map showing the project location and area of influence.

The project justification should be based on combined economic, environmental and social assessments. To this end, this chapter shall describe the current situation in the sector, explain the problems or the needs to be satisfied by the project and present the constraints associated with the project implementation.

### **Description of the Project Environment**

This chapter shall first determine the limits of the study area that shall be defined in order to encompass all project direct and indirect impacts. The description and analysis of the physical, biological and human conditions shall be addressed. Relevant environmental and social issues within this area, including any changes anticipated before project implementation shall also be described.

Within the human environment, key issues that shall be considered include population characteristics and trends, revenue disparities, gender differences, health problems, natural resource access and ownership, land use patterns and civil society organisation level. For further information on typical issues to consider in an ESIA, refer to **Annex 9**.

It shall also address the interrelations between the environmental and social components and the importance (value) that the society and local populations attach to these components, in order to identify the environmental and social components of high value or presenting a particular interest. Particular attention shall be given to the rare, threatened, sensitive or valorised environmental and social components.

The information presented shall be relevant to decisions about project location, design, operations as well as environmental and social management. Maps, figures and tables shall be included in this chapter to better illustrate the various environmental and social components.

### **Project Alternatives**

This part of the ESIA Report consists an analysis of various feasible alternatives of the project including the "without project" option. It normally comprises two sections. The first section identifies and describes the potential feasible alternatives that would allow reaching the project objectives. The second section presents a comparison of the potential alternatives on the basis of technical, economic, environmental and social criteria as well as of public views and concerns.

The alternative comparison shall address the proposed project site, technology, design and operation in terms of their potential environmental and social impacts and the feasibility of mitigating these impacts. For each of the alternatives, the environmental and social impacts shall be quantified as much as possible including their economic values where feasible. The selected alternative shall be the most environmentally and socially sustainable taking into account the technical and economical feasibility.

### **Potential Impacts and Mitigation/Enhancement Measures**

This chapter presents a detailed analysis of beneficial and adverse impacts of various components of the selected project alternative on the physical, biological and human (social, cultural and economic) environments. The methodology of assessment, based on a rigorous scientific method, shall be first presented. Then all environmental and social, direct and indirect, short and long-term, temporary and permanent impacts shall be described and assessed, indicating their importance levels and their probability of occurrence. The importance levels may be assessed on the basis of the nature, extent, intensity and duration of the impact, as well as on the sensitivity of the concerned environmental and social components and perceptions of the public. Irreversible or unavoidable impacts shall be clearly identified. Cumulative effects shall also be addressed taking into account other projects or actions planned in the study area.

Appropriate mitigation measures shall be identified to prevent, minimise, mitigate or compensate for adverse environmental and/or social impacts. Moreover, enhancement measures shall be developed in order to improve project environmental and social performance. Roles and responsibilities to implement measures shall be clearly defined. The cost of the measures shall be estimated, including the cost for environmental and social capacity building and gender mainstreaming, if necessary. Residual impacts shall be presented.

### **Environmental Hazard Management**

Whenever relevant, this chapter shall describe the security measures and propose a preliminary contingency plan for the construction and operation phases of the project (possible contingency situations, major actions to properly react to accidents, responsibilities and means of communications).

For projects that may cause major technological accidents whose consequences may exceed the project site, the ESIA shall include an analysis of the technological accident risk: identification of hazard and potential consequences, estimation of the consequences' magnitude and frequency and risk estimation and evaluation.

### **Environmental and Social Monitoring Program**

The first section of this chapter shall describe the surveillance measures aimed at ensuring that the proposed mitigation and enhancement measures are effectively implemented during the implementation phase. The second section concerns the environmental and social monitoring activities designed to measure and evaluate the project impacts on some key environmental and social components of concern and to implement remedial measures, if necessary. Indicators, roles and responsibilities shall be clearly defined. The cost of the programme shall be estimated, including the cost for environmental and social capacity building, if necessary.

### **Public Consultations**

This chapter shall summarise the actions undertaken to consult the groups affected by the project as well as other concerned key stakeholders including Civil Society

Organisations. The detailed record of the consultation meetings shall be presented in annex to the ESIA Report.

### **Conclusion**

The Conclusion shall specify the environmental and social acceptability of the project, taking into account the impacts and measures identified during the assessment process. It shall also identify any other conditions or external requirements for ensuring the success of the project.

### **Annexes**

- i. List of the professionals and organizations having contributed to the preparation of the ESIA Report.
- ii. List of consulted documents including project-related reports.
- iii. Baseline data referred to in the Report.
- iv. Record of consultation meetings with primary and secondary stakeholders.



## Annex 6

### **OUTLINE OF A TYPICAL FULL RESETTLEMENT ACTION PLAN**

**1. Description of the Project, Project Area and Area of Influence**

Provide a general description of the project and the area of influence.

**2. Potential Impacts**

Description of the project components or activities that would give rise to resettlement, zone of impact of such activities and the alternatives considered to avoid or minimize resettlement.

**3. Organizational Responsibility**

The institutional arrangements within the executing agency and provision of adequate resources to the executing agency should be discussed and all inter-agency coordination should be described. The capacity and commitment of the executing agency to carry out the resettlement plan should also be evaluated. If necessary, strengthening of the executing agency should be considered and the steps that will be taken, together with a timetable and budget, should be described at the project preparation phase. There should be considerable scope for involving the local people and Non Governmental Organizations (NGOs) in planning, implementing and monitoring resettlement.

**4. Community Participation**

A description of consultations and participation of the displaced and hosts communities in the design and implementation of the resettlement activities including a summary of the views expressed and how these views were taken into account in preparing the resettlement plan.

A review of the resettlement alternatives presented and choices made by displaced persons, including choices related to forms of compensation and resettlement assistance to relocating as individual families or as part of pre-existing communities and to retaining access to cultural property (e.g. places of worship, cemeteries, etc).

Description of procedures for redress of grievances by people affected to project authorities throughout the planning and implementation.

**5. Integration with Host Communities**

Consultations with host communities and local governments and arrangements for prompt tendering of any payments due to the hosts for land or other assets should be provided to resettlers. Arrangements for addressing any conflict that may arise between the resettlers and host communities should also be made.

Appropriate measures should be taken to augment public services (e.g. education, water, health and production) in host communities to make them comparable to services provided to resettlers.

**6. Socio-economic Studies**

- (a) A population census covering current occupants of the affected area including the description of the production systems, household organization, baseline information on livelihoods and standards of living of the displaced population.
- (b) An inventory of assets of displaced households, the magnitude of the expected loss (total or partial) for individual or group assets and the extent of physical and economic displacement.
- (c) Information on disadvantaged groups or persons for whom special provisions may have to be made.
- (d) Provisions to update information on the displaced people's livelihoods and standards of living at regular intervals so that the latest information is available at the time of their displacement.
- (d) Description of land tenure systems including common property and non-title based land ownership or allocation system recognized locally and related issues.
- (e) Public infrastructure and social services that will be affected
- (f) Social and cultural characteristics of displaced communities.

**7. Legal Framework including Mechanisms for Conflicts Resolution and Appeals**

- (a) The applicable legal and administrative procedures including a description of the remedies available to displaced persons in the judicial process and the normal timeframe for such procedures and available alternative dispute resolution mechanisms that may be relevant to the project.
- (b) Laws and regulations relating to the agencies responsible for implementing resettlement activities.
- (c) Any legal steps necessary to ensure the effective implementation of resettlement activities including a process for recognizing claims to legal rights to land – including claims that derive from customary and traditional law and usage.

**8. Institutional Framework**

- (a) The identification of agencies responsible for resettlement activities and NGOs that may have a role in project implementation.
- (b) An assessment of the institutional capacity of such agencies and NGOs.

**9. Eligibility**

Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance including relevant cut-off dates.

**10. Valuation of and Compensation for Losses**

- (a) The methodology to be used in valuing losses to determine their replacement cost, a description of the proposed types and levels of compensation under local laws and such supplementary measures to achieve replacement cost for lost assets.
- (b) A description of the packages of compensation and other resettlement measures that will assist each category of eligible displaced persons to achieve the objectives of this policy.

**11. Identification of Alternative Sites and Selection of Resettlement Site(s), Site Preparation and Relocation**

- (a) Institutional and technical arrangements for identifying and preparing relocation sites for which a combination of productive potential, locational advantages and other factors are at least comparable to the ancillary resources.
- (b) Procedures for physical relocation under the project including timetables for site preparation and transfer.
- (c) Any measures to prevent influx of ineligible persons at the selected sites.
- (d) Legal arrangements for regularizing tenure and transferring titles to resettlers.

**12. Shelter, Infrastructure and Social Services**

Plans to provide or finance housing, infrastructure (e.g. roads, water supply, etc) and social services (schools, health services), plans to ensure comparable services to host populations and any necessary site development.

**13. Environmental Protection**

An assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage the impacts.

**14. Implementation Schedules**

An implementation schedule covering all resettlement activities from preparation through implementation including target dates for achievement of expected benefits to resettlers and hosts and terminating the various forms of assistance.

**15. Costs and Budget**

Tables indicating breakdown of cost estimates for all resettlement activities including allowances for inflation and other contingencies, timetable for expenditures, sources of funds and arrangements for timely flow of funds.

**16. Monitoring and Evaluation**

Arrangements for monitoring of resettlement activities by the implementing agency supplemented by independent monitors as appropriate to ensure complete and objective information, performance monitoring indicators to measure inputs, outputs and outcomes for resettlement activities, evaluation of the impacts of resettlement for a reasonable period of time after the resettlement activities have been completed.

## Annex 7

### AN ABBREVIATED RESETTLEMENT ACTION PLAN

1. A census survey of the expected size of the displaced persons, their socio-economic status including the value of their assets and other sources of livelihood should be carried out
2. Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance including relevant cut-off dates.
3. The displaced people and the host population should be consulted about acceptable project alternatives and should be informed about project's potential impacts on them.
4. Description of compensation options to be offered and other resettlement assistance to be provided should be documented and discussed with the resettlers including their preferred choice. It would be preferable to use local NGOs in this process.
5. Institutional responsibilities for implementation of the resettlement plan including involvement of NGOs in monitoring the plan should be established.
6. The schedules, budget and sources of funds should be agreed upon with the executing agency.

## **Annex 8**

### **GENERIC CONTENTS OF AN ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

An Environmental and Social Management Plan (ESMP) shall follow the Environmental Impact Assessments Guidelines (1997).

## Annex 9

### TYPICAL ENVIRONMENTAL AND SOCIAL ISSUES TO CONSIDER IN ESIA

Environmental and Social Impact Assessment studies shall address key crosscutting issues in accordance with the Environmental Management Act, national legislation and policies as well as Roads Authority Environmental and Social Management Guidelines in the Road Sector. For donor funded projects, the consultant shall review donor's policies and guidelines on Environmental and Social safeguards. While assessment contents depend on the nature and scope of the project, plan or program, there are typical environmental and social components in the human and natural environments that shall be considered. The following components may not require to be thoroughly analyzed in ESIA studies, but their importance and significance in relation to the nature and scope of the considered project, plan or program shall at least be assessed.

#### 1. Human environment

The components to consider in the human environment include the elements and characteristics of the social, cultural and economic environments as well as infrastructures and services and land use patterns in the project area and its zone of influence.

### 2 Social Environment

#### 2.1 Population

- Demographic situation: population size, age and sex composition, geographic distribution, density, ethnic groups, literacy and education, languages, etc.
- Demographic trends (fertility, birth and mortality rates, growth, forecast, etc.) and pressures/problems associated with demographic trends.
- Characteristics of poor people and other vulnerable groups: who they are, where they live, employability level, economic activities, access to productive factors, etc.
- Migration patterns (internal and trans-border) and problems associated with migration (male migration, rural depopulation, urbanisation, refugees, ethnic conflicts, etc).

#### 2.2 Gender

- Gender perspective in legal and policy framework (marriage codes and law, inheritance laws, property law, labour law, immigration laws, education and health policy, agricultural and rural development policy, economic policy with regard to gender budgeting; etc).
- Socio-cultural norms regarding the gender division of labour, rights and responsibilities, access to and control over resources.
- Participation in decision making at all levels: family, community and national.

- Existence and capacity of Gender/Womens' machinery.
- Existence and capacity of Civil Society Organizations (CSOs) and women's organizations.
- Types of developmental programmes and projects targeting women and key government agency and donors.

### 2.3 Health

- HIV/AIDS epidemiological situation, especially among the 15-24 and 25-34 years' age groups.
- Malnutrition status, socio-economic characteristics of malnourished people, initiatives targeting nutritional security.
- Communicable diseases (acute respiratory infection, diarrhea, cholera, malaria, sexually transmitted diseases, etc): frequency, importance per age group and sex, major causes, etc.
- Non-communicable diseases (lung diseases, cancers, heart diseases, mental problems, poisoning, etc): frequency, importance per age group and sex, major causes, etc.
- Tropical diseases (yellow fever, dracunculosis, onchocerciasis, etc): frequency, importance per age group and sex, major causes, etc.
- Injuries and violent assaults, particularly against women, youth, elderly and other vulnerable groups.
- Health and safety at work (work related injuries, contamination associated with pesticide or fertilizer use, existing control programmes and regulations, etc).
- Environmental health issues (traffic accidents, air pollution, sanitation, water supply contamination, etc): frequency, importance per age group and sex, major causes, etc.
- Mortality (particularly maternal, infantile (under 1 year) and among children (under 5 years)), morbidity and disability.
- Hygiene and health awareness.

### 2.4 Civil Society

- Composition and size of the Civil Society Organizations (local, regional, national and international CSOs active in the study area): community-based organisations, non-governmental organizations, professional associations, interest groups, women groups, religious groups, private sector associations, etc.
- Key decision makers at the local and regional levels.
- Dynamism of CSOs in the study area: spontaneous establishment of CSOs (no government or donor funding), CSO survival when external funding decreases, level of participation, success of sponsored projects, etc.
- Types of developmental projects and programs supported by key CSOs.
- Organisational structures of CSOs and co-operation mechanisms.



- Level of organisation of vulnerable groups (youth, elderly, vulnerable ethnic groups, etc), poor and women and participation in political and community activities.

## 2.5 Societal Framework

- Country's position on human rights and gender equality and implementation levels.
- National laws, policies and programmes aiming to address social problems, particularly population growth pressures and inequalities.
- Governments' priorities in terms of development (social, economic, institutional, etc), especially in the study area.
- Governmental spending priorities and funds allocated to social sectors (particularly primary education, preventive health care and nutrition programs).
- Governmental institutions and administrative structures.
- Capacities in the environmental and social sectors (including local, regional and national institutions involved in the study area).
- Local and regional political and administrative structures (traditional and modern) and their interrelations.

## 2.6 Cultural Environment

- Cultural heritage: customs and traditions, traditional activities, fundamental values, religious and/or ancestral beliefs, ethnic dialects, leisure, etc.
- Right and use of natural resources related to cultural practices (religious sacrifices, traditional medication, etc).
- Cultural factors contributing to excluding some groups from development benefits.
- Major concerns, opinions, interests, and aspirations of local populations;
- Environmental problems awareness, attitude towards nature.
- Architectural, archaeological and landscape heritage, as well as any other heritage element protected or not by laws or regulations.

## 2.7 Economic Environment

- Major economic activities at the local and regional levels and growth trends.
- Relative importance of the formal and informal sectors.
- Primary sector activities in the region: agricultural production ( major crops, production system, markets, etc), animal husbandry (herd composition, migration patterns, major products, etc), mine production, etc.
- Secondary sector activities in the region: major industries, particularly transformation industries for primary sector products, etc.
- Tertiary sector activities in the region: handcrafts, trading, tourism, financial services, etc.

- Right, use and dependence on renewable natural resources (forests, water, animals, soils, etc) and non-renewable resources (minerals, petroleum, gas, etc) for income generation and self-consumption.
- Inequality patterns (per-capita income among major groups, wealth distribution, rural-urban differences, etc) and poverty determinants (growth distribution, employment situation, socio-economic constraints, etc).
- Economic differences between men and women, in particular in the division of labour, income level, property rights, access to and control over resources, employability, etc.
- Working conditions and employment situation in the region: active population, unemployment rate, incomes and salaries, availability of qualified manpower, etc.

## 2.8 Infrastructures and Services

- Energy sector: diesel access, electric network, affordability, etc.
- Communications: mail service, radio, telephone network (fixed and mobile), internet access, television, affordability, etc.
- Transportation: road and trail network, railways network, waterways network, ports, airports and air transport, transport conditions in different seasons, public and private transportation means, isolation level, affordability, etc.
- Water supply: facilities (open wells, distribution systems, etc), ratio per capita, water quality, affordability, etc.
- Waste and sanitation: management practices, facilities (sewage, disposal site, etc), affordability, etc.
- Health services: facilities (hospitals, health centres, drugstores, etc), inputs (drugs/pharmaceuticals), personnel, ratio per capita, affordability, etc.
- Education services: facilities (schools, classes, alphabetisation centres, etc), material, personnel, ratio per capita, affordability, etc.
- Other services or programmes well implemented in the study area: organized sportive activities, community centres, youth centres, delinquency reduction programmes, etc.
- Supply of social services to poor people (education, health, water supply, sanitation, food security, etc);
- Inequalities in service access.

# **GENERAL CONDITION OF CONTRACT**

## Section 7: General Conditions of Contract

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## Section 7. General Conditions of Contract

### A. General Provisions

#### 1. Definitions

1.1 Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

“Contract” means the Agreement entered into between the Parties and includes the Contract Documents.

“Contract Documents” means the documents listed in GCC 2.1, including all attachments, appendices, and all documents incorporated by reference therein, and shall include any amendments thereto.

“Contract Price” means the sum stated in the Agreement representing the maximum, total or estimated amount payable for the provision of the Services.

“Days” are calendar days; “months” are calendar months.

“Eligible Countries” means the countries and territories eligible as listed in the SCC.

“GCC” means these General Conditions of Contract.

“Government” means the Government of the Republic of Malawi.

"Member", in case the Supplier consists of a joint venture of more than one entity, means any of these entities; "Members" means any of these entities, and "Member in charge" means the entity specified in the SCC to act on their behalf in exercising all the Suppliers' rights and obligations towards the Procuring Entity under this Contract.

"Party" means the Procuring Entity or Supplier, as the case may be, and "Parties" means both of them.

“Personnel” means persons engaged by the Supplier or by any Sub-consultant as employees and assigned to the performance of the Services or any part thereof; “Foreign Personnel” means such persons who at the time of being so engaged had their domicile outside the Republic of Malawi; “Local Personnel” means such persons who at the time of being so engaged had their domicile inside the Republic of Malawi; and “Key Personnel” means those Personnel that are regarded by the Supplier as essential to the successful completion of the Services and related tasks.

“Procuring Entity” means the Roads Authority of Malawi, purchasing the Services, as specified in the Agreement, hereinafter called “the Client”.

“SCC” means the Special Conditions of Contract.

“Services” means the consultancy services to be performed by the Supplier as described in the contract.

“Supplier” means the natural person, private or government entity, or a combination of the above, whose proposal to perform the Contract has been accepted by the Procuring Entity and is named as such in the Agreement, and includes the legal successors or permitted assigns of the Supplier, hereinafter called “the Consultant”.

“Sub-consultant” means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Services to be provided is subcontracted by the Supplier.

“Time-Based contract” means a contract under which the Services are provided on the basis of fixed fee rates and payments are made on the basis of time actually spent.

#### 2. Corrupt Practices

- 2.1 It is the Government's policy to require that Procuring Entities, as well as Bidders and Consultants under Government financed contracts, observe the highest standards of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Government:
- (a) defines, for the purposes of this provision, the terms set forth below as follows:
    - (i) "corrupt practice" means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
    - (ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
    - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish prices at artificial, noncompetitive levels; and
    - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract.
  - (b) will debar a Bidder from participation in public procurement for a specified period of time if it at any time determines that the firm has engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a contract.
- 2.2 In pursuit of the policy defined in GCC Clause 2.1, the Procuring Entity may terminate a Contract in accordance with GCC Clause 16 if it at any time determines that corrupt, fraudulent, collusive or coercive practices were engaged in by representatives of the Procuring Entity or of a Consultant, during the procurement or the execution of that contract.

### 3. Contract Documents

- 3.1 The documents forming the Contract shall be interpreted in the following order of priority:
- (a) Contract Agreement, including all appendices;
  - (b) Special Conditions of Contract;
  - (c) General Conditions of Contract; and
  - (d) Terms of Reference
  - (e) any other document listed in the SCC as forming part of the Contract.
- 3.2 All documents forming the Contract are intended to be correlative, complementary, and mutually explanatory.
- 3.3 No amendment, modification or other variation of the Contract shall be valid unless a Modification to Contract is made in writing, is dated, expressly refers to the Contract, and is signed by a duly authorised representative of each party thereto.
- 3.4 If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.
- 3.5 Any action required or permitted to be taken, and any document required or permitted to be executed, under the Contract by the Client or the Consultant may be taken or executed by the authorised representatives specified in the SCC.
- 3.6 The Contract constitutes the entire agreement between the Client and the Consultant and supersedes all communications, negotiations and agreements (whether written or oral)

of parties with respect thereto made prior to the date of Contract. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

#### **4. Law Governing the Contract**

- 4.1 This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the laws of the Republic of Malawi, unless otherwise specified in the SCC.

#### **5. Language**

- 5.1 This Contract has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract, unless otherwise specified in the SCC.

#### **6. Notices**

- 6.1 Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered to an authorised representative of the Party at the address specified in the SCC.

#### **7. Location**

- 7.1 The Services shall be performed at such locations as are specified in the Terms of Reference and, where the location of a particular task is not so specified, at such locations, whether in the Republic of Malawi or elsewhere, as the Client may approve.

#### **8. Authorised Representatives**

- 8.1 Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultant may be taken or executed by the authorised representatives specified in the SCC.

#### **9. Taxes and Duties**

- 9.1 Unless otherwise specified in the SCC, the Consultant, Sub-consultants, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the law of the Republic of Malawi, the amount of which is deemed to have been included in the Contract Price.

#### **10. Eligibility**

- 10.1 The Consultant and its Subconsultants shall have the nationality of an eligible country. A Consultant or Subconsultant shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
- 10.2 The Consultant and its Sub-consultants shall provide Personnel who shall be citizens of eligible countries.

### **B. Commencement, Completion, Modification and Termination of Contract**

#### **11. Effectiveness of Contract**

- 11.1 This Contract shall come into effect on the date the Contract is signed by both parties or such other later date as may be stated in the SCC.

#### **12. Commencement of Services**

12.1 The Consultant shall begin carrying out the Services thirty (30) days after the date the Contract becomes effective, or at such other date as may be specified in the SCC.

### **13. Expiration of Contract**

13.1 Unless terminated earlier pursuant to Clause 16, this Contract shall terminate at the end of such time period after the Effective Date as is specified in the SCC.

### **14. Modification**

14.1 Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the Parties.

### **15. Force Majeure**

#### **Definition**

15.1 For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

#### **No Breach of Contract**

15.2 The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

#### **Extension of Time**

15.3 Any period specified within the Contract by which a Party is required to complete any action or task, if as a result of Force Majeure, shall be extended for a period equal to the time during which the Party was unable to perform the action or task.

#### **Payments**

15.4 During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by it during such period for the purposes of the Services and in reactivating the Service after the end of such period.

### **16. Termination**

#### **By the Client**

16.1 The Client may terminate this Contract, by not less than thirty (30) days' written notice of termination to the Consultant, to be given after the occurrence of any of the events specified in paragraphs (a) through (e) of this Clause 16.1 and sixty (60) days' in the case of the event referred to in (f):

- (a) if the Consultant does not remedy a failure in the performance of its obligations under the Contract, within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing;
- (b) if the Consultant become insolvent or bankrupt;
- (c) the Consultant fails to comply with any final decision reached as a result of dispute settlement proceedings pursuant to GCC Clause 35;



- (d) the Consultant, in the judgement of the Client, has engaged in corrupt, fraudulent, collusive or coercive practices in competing for or in executing the Contract;
- (e) if, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (f) if the Client, in its sole discretion, decides to terminate the Contract.

#### **By the Consultant**

16.2 The Consultant may terminate this Contract, by not less than thirty (30) days' written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) to (d) of this Clause 16.2:

- (a) If the Client fails to pay any monies due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause 7 within forty-five (45) days after receiving written notice from the Consultant that such payment is overdue;
- (b) If the Client is in material breach of its obligations pursuant to the Contract and has not remedied the same within forty-five days (or such longer period as the Consultant may have subsequently approved in writing) following the receipt by the Client of the Consultant's notice specifying such breach;
- (c) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (d) If the Client fails to comply with any final decision reached as a result of dispute settlement proceedings pursuant to GCC Clause 35.

#### **Payment upon Termination**

16.3 Upon termination of this Contract pursuant to Clauses 16.1 or 16.2, the Client shall make the following payments to the Consultant:

- (a) Remuneration pursuant to Clause 29 or 30 for Services satisfactorily performed prior to the effective date of termination;
- (b) Except in the case of termination pursuant to paragraphs (a) to (d) of Clause 16.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the contract, including the cost of the return travel of the Personnel and their eligible dependents.

### **C. Obligations of the Consultant**

#### **17. General**

17.1 The Consultant shall perform the Services and carry out its obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-consultants or third parties.

#### **18. Conflict of Interests**

##### **Consultant Not to Benefit from Commissions, Discounts etc**

18.1 The remuneration of the Consultant pursuant to Clause 29, 30 or 33 shall constitute the Consultant's sole remuneration in connection with this Contract or the Services, and the Consultant shall not accept for its own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of its obligations under the Contract, and the Consultant shall use its best

efforts to ensure that the Personnel, any Sub-consultants, and agents of either of them similarly shall not receive any such additional remuneration.

### **Consultant and Affiliates Not to Be Otherwise Interested in Project**

18.2 The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and its affiliates, as well as any Sub-consultant and any of its affiliates, shall be disqualified from providing goods, works, or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

### **Prohibition of Conflicting Activities**

18.3 Neither the Consultant nor its Sub-consultants nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

- (a) during the term of the Contract, any business or professional activities in the Republic of Malawi which would conflict with the activities assigned to them under the Contract; or
- (b) after the termination of this contract, such other activities as may be specified in the SCC.

### **19. Confidentiality**

19.1 The Client and the Consultant shall keep confidential and shall not without the written consent of the other party hereto, divulge to any third party any reports or data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Consultant may furnish to its Sub-consultant such documents, data, and other information it receives from the Client to the extent required for the Sub-consultant to perform its work under the Contract, in which event the Consultant shall obtain from such Sub-consultant an undertaking of confidentiality similar to that imposed on the Consultant under the Contract.

### **20. Insurance to Be Taken Out by the Consultant**

20.1 The Consultant shall take out and maintain, and shall cause any Sub-consultants to take out and maintain, at its (or the Sub-consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the SCC.

20.2 The Consultant, at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.

### **21. Consultant's Actions Requiring Client's Prior Approval**

21.1 The Consultant shall obtain the Client's prior approval in writing before taking any of the following actions :

- (a) entering into a subcontract for the performance of any part of the Services;
- (b) appointing such members of the of the personnel not listed by name in the Contract; and
- (c) any other action that may be specified in the SCC.

### **22. Reporting Obligations**

22.1 The Consultant shall submit to the Client the reports and documents specified in the Terms of Reference in the form, in the numbers, and within the periods set forth in the said Terms of Reference.

**23. Documents Prepared by the Consultant to Be the Property of the Client**

- 23.1 All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Consultant in accordance with the Contract shall become and remain the property of the Client, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to the Client, together with a detailed inventory thereof. The Consultant may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SCC.

**D. Consultant's Personnel****24. Description of Personnel**

- 24.1 The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in the Contract. The Key Personnel and Sub-consultants listed by title as well as by name in Contract are hereby approved by the Client.

**25. Removal and/or Replacement of Personnel**

- 25.1 Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, it becomes necessary to replace any of the Key Personnel, the Consultant shall provide as a replacement a person of equivalent or better qualifications.
- 25.2 If the Client finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Client's written request specifying the grounds therefor, provide as a replacement a person with qualifications and experience acceptable to the Client.
- 25.3 The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

**E. Obligations of the Client****26. Assistance and Exemptions**

- 26.1 Unless otherwise specified in the SCC, the Client shall use its best efforts to ensure that the Government shall:
- (a) Provide the Consultant, Sub-Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants or Personnel to perform the Services.
  - (b) Arrange for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in the Republic of Malawi.
  - (c) Facilitate prompt clearance through customs of any property required for the Services and of the personal effects of the Personnel and their eligible dependents.
  - (d) Issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services.
  - (e) Provide assistance to the Consultant's international personnel and, where applicable international Sub-Consultants employed by the Consultant, to obtain registration or obtain any permit to practice their profession in the Republic of Malawi.
  - (f) Grant to the Consultant, any Sub-Consultants and the Personnel of either of them the privilege, pursuant to the laws of the Republic of Malawi, of bringing into the Republic of

Malawi reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Personnel and their dependents and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services.

- (g) Provide to the Consultant, Sub-Consultants and Personnel any such other assistance as may be specified in the SCC.

## **27. Change in Laws**

27.1 Unless otherwise specified in the Contract, if after the date of the Request for Proposals, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the Republic of Malawi (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the period for completion of the Services and/or the Contract Price, then such time period and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Consultant has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for by a contract modification or a price adjustment.

## **28. Services and Facilities**

28.1 The Client shall make available to the Consultant the Services and Facilities listed in the Contract.

### **F. Payments to the Consultant**

## **29. Contract Price and Currency**

29.1 The Contract Price shall be expressed as a specific amount or amounts in the Agreement representing the estimated amount for a Time-Based contract.

29.2 Payments shall be made in the currency or currencies of the contract price, unless otherwise specified in the SCC.

29.3 In consideration of the Services performed by the Consultant under the Contract, the Client shall make to the Consultant such payments in such manner as is provided by the Contract.

## **30. Payment**

30.1 The Contract Price shall be an estimated amount, based on the Breakdown of Cost Estimates in the Contract.

30.2 Payment shall be made for the time actually spent and for reimbursable expenses actually incurred by the Consultant in the performance of the Services.

30.3 Fees for the Personnel shall be determined on the basis of time actually spent by the Personnel in the performance of the Services after the date determined in accordance with the Commencement Date of the Services, or such other date as the Parties may agree in writing, and at the rates specified in the Contract. Personnel time spent in the performance of the Services shall include time for necessary travel via the most direct route, at the rates detailed in the Contract, unless otherwise specified in the SCC.

30.4 Reimbursable expenditures shall include costs actually and reasonably incurred by the Consultant in the performance of the Services, as specified in the Contract.

- 30.5 The Consultant's total remuneration shall not exceed the ceiling amount stated in the SCC. The Consultant shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of the ceiling amount.
- 30.6 Separate invoices shall be submitted for fees and for reimbursable expenditure. Invoices shall be supported by the documentation specified in accordance with GCC 32.2.
- 30.7 A final payment shall be made against submission by the Consultant of a final statement, identified as such and approved by the Client. The final statement shall be deemed approved by the Client ninety calendar days after receipt by the Client unless the Client, within this period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the deliverables or the final statement.
- 30.8 Any amount which the Client has paid or caused to be paid which is in excess of the amounts actually payable in accordance with the provisions of the Contract, shall be reimbursed by the Consultant to the Client within thirty days after receipt by the Consultant of a notice thereof. Any such claim by the Client for reimbursement must be made within twelve months after receipt by the Client of a final statement approved by the Client.

### **31. Payment Schedule and Advance Payment**

- 31.1 All payments under the Contract shall be made in accordance with the payment schedule specified in the SCC.
- 31.2 Unless otherwise stated in the SCC, where any payment is made in advance of any deliverables as an advance payment, the payment shall be made against the provision by the Consultant of a bank guarantee for the same amount, and shall be valid for the period stated in the SCC.
- 31.3 Should the advance payment guarantee cease to be valid and the Consultant fails to re-validate it, a deduction equal to the amount of the advance payment may be made by the Client from future payments due to the Consultant under the contract.
- 31.4 If a Contract is terminated for any reason, the guarantee securing the advance may be invoked in order to recover the balance of the advance still owed by the Consultant.

### **32. Payment Terms**

- 32.1 Unless otherwise specified in the SCC, payments shall be made by the Client, no later than sixty days after submission of a request for payment by the Consultant.
- 32.2 The Consultant's request for payment shall be made to the Client in writing, accompanied by invoices and supporting documents. The supporting documentation required shall be as specified in the SCC.
- 32.3 The Client shall notify the Consultant of the inadmissibility of a request for payment due to an error, discrepancy, omission or any other reason so that the Parties may resolve such error, discrepancy, omission or other fault and agree a solution to enable payment of the corrected request for payment. The Client shall not unreasonably withhold payment of any undisputed portion of a request for payment. Should any discrepancy be found to exist between actual payment made and costs authorised to be incurred by the Consultant, the Client may add or subtract the difference from any subsequent payments.
- 32.4 If the Client has delayed payments beyond fifteen (15) days after the due date stated in the SCC, interest shall be paid to the Consultant for each day of delay at the rate stated in the SCC.

### **33. Price Adjustments**

- 33.1 Prices charged by the Consultant for the Services performed under the Contract shall not vary from the prices quoted in the Contract, with the exception of any price adjustments authorised in the SCC.

### **G. Settlement of Disputes**

#### **34. Amicable Settlement**

- 34.1 The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

#### **35. Dispute Settlement**

- 35.1 Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the laws of the Republic of Malawi.

## **SPECIAL CONDITIONS OF CONTRACT**

## Section 8: Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC Clause	Special Conditions of Contract
GCC 1.1	The Procurement Reference Number for the contract is: <b>RA/CON/DEV/CR/KU-MC/UP/2024-25/31</b>
GCC 1.1	The Eligible Countries are those described in Section 5 of the Request for Proposals document.
GCC 3.1	<i>GCC 3.1 is ammended in its entirety as follows:</i> The documents forming the contract shall be interpreted in the following order of priority: <ul style="list-style-type: none"> <li>• <b>Agreement</b></li> <li>• <b>Notice of Acceptance</b></li> <li>• <b>Minutes of Contract Negotiations</b></li> <li>• <b>Special Conditions of Contract (SCC)</b></li> <li>• <b>General Conditions of Contract (GCC)</b></li> <li>• <b>Terms of Reference</b></li> <li>• <b>Technical Proposal with Standard Forms T4, T5, T6</b></li> <li>• <b>Financial Proposal with Standard Forms F2, F3, F4</b></li> </ul>
GCC 4.1	The Contract shall be governed by the laws of <u>Malawi</u>
GCC 5.1	The language of the contract shall be <u>English</u> .
GCC 6.1	The addresses for Notices are: For the Client: Roads Authority Functional Building Off Paul Kagame (Chilambula) Road Private Bag B346 Lilongwe 3  Attention: The Chief Executive Officer E mail: <a href="mailto:ra@ra.org.mw">ra@ra.org.mw</a>  For the Consultant: <i>(Insert Name)</i> Street Address: <i>(Insert)</i> Town/City: <i>(Insert)</i> Country: <i>(Insert)</i> Telephone: ..... Email:.....
GCC 8.1	The Authorised Representatives are: for the Roads Authority <u>Eng. Ammiel Champiti, Chief Executive Officer</u>  for the Consultant: <i>(Insert Name and position)</i>
GCC 11.1	Date of signing of the contract by both parties <i>(Insert)</i>  <i>Add the following to this clause:</i> <b>Termination of Contract for Failure to Become Effective</b> If this Contract has not commenced within 30days after the effective date, either Party may, by not less than twenty two (22) days written notice to the other Party, declare this Contract to be null and void.
GCC 12.1	The Consultant shall commence the Services 14 days from the date the contract becomes effective. Commencement of Phase III shall depend on availability of funds for the Road Construction Works



	<p style="text-align: center;"><b>EITHER</b></p> <p>The Roads Authority reserves its rights to retender the Consultancy Services for site supervision of this project if the period between submission of the Final Design Report and Tender Advertisement for contractors' road construction works is longer than one calendar year (365 days).</p> <p style="text-align: center;"><b>OR</b></p> <p>If the period between submission of the Final Design Report and Tender Advertisement for contractors' road construction works is longer than one calendar year (365 days) then the Roads Authority will pay an inflation factor as determined by the Malawian Statistical Office to be applied to the site supervision costs of the consultant whose effect shall come into force from the date of submission of the Final Design Report</p>
GCC 13.1	<p>The period for expiration of the contract is:</p> <p>Phase 1 and 2 -Feasibility Study and Detailed Engineering Design:</p> <p style="margin-left: 40px;">a) The first 10km, 4 months after Commencement Date b) The rest of the road section, 8.5 months after the Commencement Date.</p> <p>Phase 3 24 months followed by 12 months Defects Notification Period upon successful completion of phases 1 and 2 services and availability of funds for the construction Works.</p>
GCC 16.1 (g)	<p>Add the following sub-clause 16.1(g) :</p> <p>If the Consultant fails to act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Client, or fails to support and safeguard the Client's legitimate interests in any dealings with third parties. In this case the Client shall give at least thirty (30) calendar days' written notice of termination to the Consultant.</p> <p>Add the following sub-clause 16.1(h):</p> <p>If the Consultant does not perform the Services in accordance with the Contract and the agreed Work Program for a period of thirty (30) days. In this case the Client shall give at least thirty (30) calendar days' written notice of termination to the Consultant.</p>
GCC 17.1	<p>Add the following to this Clause:</p> <p>If the Consultant fails to perform the Services and fails to carry out his obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, thereby rendering major elements of the designs unusable, then the following penalties shall apply;</p> <p>The consultant will be barred from participating in any design works with the Roads Authority for a period of 2 years.</p> <p>If the Consultant does not perform the Services in accordance with the Contract and the agreed Work Program then a deduction of 0.1% of the Lumpsum Contract Price per delayed calendar day shall apply. The maximum deduction shall be 3% of the lump sum contract price.</p>
GCC 18.3(b)	The following activities are prohibited: <i>N/A</i>
GCC 20.1	<p>The risks and coverage shall be:</p> <p>(i) Third Party motor vehicle liability insurance in respect of motor vehicles operated in the Client's country by the Consultant or its Experts or Sub-</p>

	<p>consultants, with a minimum coverage in accordance with the applicable law in Malawi</p> <p>(ii) Third Party liability insurance, with a minimum coverage in accordance with the applicable law in Malawi</p> <p>(iii) Employer's liability and workers' compensation insurance in respect of the experts and Sub-consultants in accordance with the relevant provisions of the applicable law in Malawi, as well as, with respect to such Experts, any such life, health, accident, travel or other insurance as may be appropriate.</p> <p>(iv) Professional liability with a minimum coverage of 1.2 times the professional fees.</p> <p>(v) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant's property used in the performance of the Services, and (iii) any documents prepared by the Consultant in the performance of the Services</p>
GCC 21.1(c)	<p>The Client's prior approval is also required for:</p> <ul style="list-style-type: none"> <li>• <b><u>Any increase in the civil works contract above the original contract sum</u></b></li> <li>• <b><u>Use of contingencies in the civil works contract</u></b></li> <li>• <b><u>Extension of time for civil works contract</u></b></li> <li>• <b><u>Approval for contractors' claims</u></b></li> <li>• <b><u>Approval of variation orders for civil works contracts</u></b></li> <li>• <b><u>Approval of subcontracting parts of civil works contracts</u></b></li> <li>• <b><u>Use of all reports or documents generated as part of the services</u></b></li> </ul>
GCC 22.1	<p>During the design phase, Failure to submit reports whether at intermediate stages or overall in relation to the time periods specified in the Terms of Reference shall result to imposition of liquidated damages equal to 1/1000th (one thousandth) of the value of the consultant's contract for the relevant phase payable per day of delay up to a maximum of 15% (fifteen percent) of the consultant's contract price.</p> <p>And during the Construction Supervision Phase, the Resident Engineer shall submit comprehensive Monthly Reports on the progress of the works as well as the Contractors' Performance Assessment Reports by the 10th of the month following the month reported. Non-compliance with that requirement will attract a penalty. A deduction of 0.1% for each calendar day of delayed submission (after 10th of each month) of the Consultant's monthly Invoice will be applied as a penalty</p>
GCC 23.1	<p>The future use of documents is restricted as follows: the document shall not be used for the purposes unrelated to the contract without the prior written approval of the Client</p>
GCC 29.2	<p>Payments shall be made in Malawi Kwacha.</p>
GCC 30.5	<p>The ceiling amount is the Contract Price</p>
GCC 31.1	<p>The payment schedule shall be:</p> <p>The services for Feasibility and Detailed Design Services will be executed on a Lump Sum Contract basis and the payment schedule shall be as follows: -</p> <p>The first 10km section and the rest of the road section</p> <ul style="list-style-type: none"> <li>▪ 10% of the Contract Price shall be paid on submission and acceptance by the client of the Inception Report.</li> <li>▪ 30% of the Contract Price shall be paid on submission and acceptance by the client of the draft Economic Feasibility and Preliminary Design Reports.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ 10% of the Contract Price shall be paid on submission and acceptance by the client of the Final Economic Feasibility and Preliminary Design Reports.</li> <li>▪ 30% of the Contract Price shall be paid on submission and acceptance, by the client of the Draft Detailed Design Report.</li> <li>▪ 20% of the Contract Price shall be paid on submission and acceptance by the client of the Final Detailed Engineering Design Report.</li> </ul> <p>Construction Supervision •</p> <p>Twenty (20) percent of the Contract value shall be paid upon receipt by Roads Authority of an acceptable Advance Payment Guarantee. The advance payment will be set off by Roads Authority in equal instalments against invoices for the subsequent six months. • Monthly payments shall be made for the actual inputs provided and reimbursable costs incurred by the consultant, against invoices supported by itemised statements and supporting documentation. • The final payment shall be made after submission and approval of the final report and a final statement of expenditure.</p>
GCC 31.2	<p>The following provisions shall apply to the advance payment and the advance bank payment guarantee:</p> <ol style="list-style-type: none"> <li>1) Twenty (20) percent of the contract value shall be paid upon receipt by Roads Authority of an acceptable Advance Payment Guarantee. The advance payment will be set off by Roads Authority in equal installments against invoices for the subsequent 6 months of the services until the advance payment has been fully set off.</li> <li>2) Guarantee shall be required in the format of the example given in Section 9, Contract Forms, or similar approved in advance by the Client.</li> </ol> <p>The period of validity of the Advance Payment Guarantee shall be: 12 months</p>
GCC 32.1	<p>Payment shall be made by the Client within 28 days of receipt of the request for payment [and within 40 days in the case of the final payment]</p>
GCC 32.2	<p>The following documentation shall be required to support requests for payment:</p> <p>Phase 1 &amp; 2:</p> <ul style="list-style-type: none"> <li>- Inception Report</li> <li>- Draft Economic Feasibility and Preliminary Design Reports.</li> <li>- Final Economic Feasibility and Preliminary Design Reports</li> <li>- Draft Detailed Engineering Design Report.</li> <li>- Final Detailed Engineering Design Report</li> <li>- Training Report</li> <li>- Receipts</li> <li>-</li> </ul> <p>Phase 3:</p> <ul style="list-style-type: none"> <li>- Reports, approved Time sheets and other agreed deliverables</li> </ul>
GCC 32.4	<p>Interest shall be paid on late payments at the rate of: Prime lending rate of the Reserve Bank of Malawi plus 1% or if not available the Inter Bank Offered Rate and shall be calculated at simple rate.</p>
GCC 33.1	<p>This contract is <b>not</b> subject to price adjustment</p>



## **Section 9: Contract Forms**

## Section 9: Contract Forms

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# Contract Agreement

This Agreement is made the..... day of the month of ..... between The Government of Malawi acting through the **Roads Authority** of **Private Bag B346, Lilongwe 3** (the “Client ”) and ..... of ..... (the “Consultant” ).

WHEREAS

- (a) the Client has requested the Consultant to provide certain consultancy services (hereinafter called the “Services”) as defined herein and attached to this Contract;
- (b) the Consultant having represented to the Client that it has the required professional skills, personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the parties hereto agree as follows:

1. The documents forming the Contract shall be in the order of priority and stated below as follows:
  - **Agreement**
  - **Notice of Acceptance**
  - **Minutes of Contract Negotiations**
  - **Special Conditions of Contract (SCC)**
  - **General Conditions of Contract (GCC)**
  - **Terms of Reference**
  - **Technical Proposal with Standard Forms T4, T5, T6**
  - **Financial Proposal with Standard Forms F2, F3, F4**
2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:
  - (a) The Consultant shall carry out the Services in accordance with the provisions of the Contract; and
  - (b) the Client shall pay the Consultant the Contract Price of \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (MWK\_\_\_\_\_ ) or such other sum as may become payable under the provisions of the Contract, at the times and in the manner prescribed by the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

Signed by \_\_\_\_\_ (for  
the Client)

Name: **Eng. Francis Dimu** Authorised Representative

Position: **Acting Chief Executive Officer**

Witnessed by:

\_\_\_\_\_

Name:

\_\_\_\_\_

—

Signed by \_\_\_\_\_ (for the  
Consultant)

Name: \_\_\_\_\_ Authorised  
Representative

Position:

\_\_\_\_\_

Witnessed by:

\_\_\_\_\_

Name:

\_\_\_\_\_

—



*Note to Bidders: The Advance Payment Security should be on the letterhead of the issuing Financial Institution and should be signed by a person with the proper authority to sign documents that are binding on the Financial Institution.*

## Advance Payment Security

Date: **[insert date (as day, month, and year) of Advance Payment Security]**

Procurement Reference No.: **[Insert Procurement Reference No]**

To: **[insert complete name of Client]**

In accordance with the payment provision included in the Contract, in relation to advance payments, **[insert complete name of Consultant]** (hereinafter called “the Consultant”) shall deposit with the Client a security consisting of **[indicate type of security]**, to guarantee its proper and faithful performance of the obligations imposed by said Clause of the Contract, in the amount of **[insert currency and amount of guarantee in words and figures]**.

We, the undersigned **[insert complete name of Guarantor]**, legally domiciled in **[insert full address of Guarantor]** (hereinafter “the Guarantor”), as instructed by the Consultant, agree unconditionally and irrevocably to guarantee as primary obligor and not as surety merely, the payment to the Client on its first demand without whatsoever right of objection on our part and without its first claim to the Consultant, in the amount not exceeding **[insert currency and amount of guarantee in words and figures]**.

This security shall remain valid and in full effect from the date of the advance payment received by the Consultant under the Contract until **[insert day and month]**, **[insert year]**.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

Name: **[insert complete name of person signing the Security]**

In the capacity of **[insert legal capacity of person signing the Security]**

Signed: **[signature of person whose name and capacity are shown above]**

Duly authorised to sign the Security for and on behalf of: **[insert complete name of the Financial Institution]**

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ **[insert date of signing]**