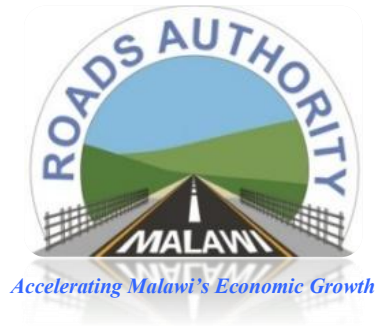


GOVERNMENT OF THE REPUBLIC OF MALAWI



ROADS AUTHORITY

**Bidding Document for the Procurement of Works by
National Competitive Bidding**

Subject of Procurement:	Construction of Lubeya Box Culvert Across Lubeya River Between Euthini and Chiseng'eze (M09) Road in Mzimba District
Procurement Reference Number:	Project ID RA/MAI/2025-26/T/BR/NR/MZ/38
Procurement Method:	Open National Competitive Bidding
Date of Issue:	28th August 2025

Functional Building, Off Paul Kagame Road , Private Bag B346
Lilongwe 3, Malawi

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Section 1. Instructions to Bidders

Section 1. Instructions to Bidders

A. General

1. Scope of Bid

- 1.1 The Procuring and Disposing Entity indicated in the Bid Data Sheet (BDS), invites Bids for construction of works as specified in Section 7, Statement of Requirements.
- 1.2 The Instructions to Bidders shall be read in conjunction with the BDS. The subject and procurement reference number, and number of lots of this Bidding Document are provided in the BDS.

2. Source of Funds

- 2.1 The Procuring and Disposing Entity indicated in the BDS has an approved budget from public funds towards the cost of the procurement named in the BDS. The Procuring and Disposing Entity intends to use these funds to cover eligible payments under the Contract.
- 2.2 The Procuring and Disposing Entity shall make payments to the supplier for each call-off order which will be subject in all respects, to the terms and conditions of the resulting agreement executed with the Procuring and Disposing Entity.

3 Corruption and Fraud

- a) the Malawi Government requires that all Bidders comply with the legal framework on corrupt and fraudulent practices as outlined in Anti-Corruption legal framework; and
- b) in line with the existing anti-corruption legal framework and policy in Malawi, regulations and policy, and as provided in this clause, a Bidder, including its agents, sub-contractors, sub-consultants, service providers, suppliers, and personnel are subject to the signed Anti-Corruption Declaration in the Bidding documents as part of the qualification criteria.

4 Eligible Bidders

- 4.1 A Bidder may be a natural person, private entity, government-owned entity or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association all parties shall be jointly and severally liable.
- 4.2 A Bidder wishing to be considered for preferences and other reservation schemes like the micro, small and medium-sized enterprise preferences, shall comply with the Public Procurement and Disposal of Public Assets (Participation by Micro Small and Medium Enterprises) Order 2020 (MSME Order).

- 4.3 A Bidder found to be in conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this Bidding process, if the Bidder and parties are associated or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Government of Malawi to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 4.4 A Bidder that has been debarred from participating in public procurement in accordance with Section 79 of the Act, at the date of the deadline for Bid submission or thereafter, shall be ineligible.
- 4.5 Government-owned enterprises shall be eligible if they can establish that they are legally and financially autonomous and are not a dependent agency, directly or indirectly, of the Procuring and Disposing Entity or the Government of Malawi.
- 4.6 A Bidder shall provide evidence of their eligibility satisfactory to the Procuring and Disposing Entity, to verify that the Bidder—
- a) has the legal capacity to enter into an Agreement and is registered with appropriate professional regulatory institution as required by existing legislation;
 - b) is not 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) has fulfilled their tax obligations in accordance with the relevant tax laws.
- 4.7 To demonstrate compliance with the criteria in sub-clause 4.6, a Bidder shall submit with its Bid—
- (i) a certified copy of its business registration certificate;
 - (ii) professional registration certificates where applicable based on the business the Bidder does;
 - (iii) a declaration that the Bidder is not debarred;
 - (iv) tax registration certificates for the Bidders issued by the Malawi Revenue Authority;

- (v) tax clearance certificate for Bidders that have operated a business for a minimum of two years; and
- (vi) such other documentary evidence as may be specified in the BDS.

5 Qualification of a Bidder

- 5.1 All Bidders shall provide in the Qualification Information Form in Section 4, Bidding Forms, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 5.2 In the event that prequalification of potential Bidders has been undertaken, only Bids from pre-qualified Bidders will be considered for award of Contract. These qualified Bidders should submit with their Bids any information updating their original prequalification applications or, alternatively, confirm in their Bids that the originally submitted prequalification information remains essentially correct as of the date of Bid submission. The update or confirmation should be provided in the Qualification Information Form in Section 4, Bidding Forms.
- 5.3 If the Procuring and Disposing Entity has not undertaken prequalification of potential Bidders, all Bidders shall include the following information and documents with their Bids, using the Qualification Information Form in Section 4, Bidding Forms, unless otherwise stated in Section 3, Evaluation and Qualification Criteria:
 - (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business or a copy of the Bidder's registration certificate where such documents have been provided to obtain registered supplier status; written power of attorney of the signatory of the Bid to commit the Bidder;
 - (b) total monetary value of construction work performed for each of the last five (5) years;
 - (c) experience in works of a similar nature and size for each of the last five (5) years, and details of work under way or contractually committed; and clients who may be contacted for further information on those contracts;
 - (d) major items of construction equipment proposed to carry out the Contract;
 - (e) qualifications and experience of key site management and technical personnel proposed for the Contract;
 - (f) reports on the financial standing of the Bidder including profit and loss statements and auditor's reports for the past five (5) years;
 - (g) evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);

- (h) authority to seek references from the Bidder's bankers;
- (i) information regarding any litigation, current or during the last five (5) years, in which the Bidder is involved, the parties concerned, and disputed amount; and
- (j) proposals for subcontracting components of the Works amounting to more than ten (10) per cent of the Contract Price.

5.4 Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements, unless otherwise stated in Section 3, Evaluation and Qualification Criteria:

- (a) the Bid shall include all the information listed in Clause 4.3 for each joint venture partner;
- (b) the Bid shall be signed so as to be legally binding on by all partners;
- (c) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
- (d) one of the partners will be nominated as being in charge, authorised to incur liabilities, and receive instructions for and on behalf of any and all partners of the joint venture; and
- (e) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

5.5 To qualify for award of the Contract, Bidders shall meet the minimum qualifying criteria specified in Section 3, Evaluation and Qualification Criteria.

5.6 Bidders applying for eligibility for a margin of preference in Bid evaluation, if permitted in the Bid Data Sheet, shall supply all information to satisfy the criteria for eligibility as described in Section 3, Evaluation and Qualification Criteria.

6 One Bid per Bidder

Each Bidder shall submit only one Bid, either individually or as a partner in a joint venture. A Bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the Bids with the Bidder's participation to be disqualified.

7 Site Visits and pre-Bid meetings

7.1 The Bidder, at its own responsibility and risk, is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and a contract for construction of the Works. The costs of visiting the Site and attending a pre-Bid meeting shall be at the Bidder's own expense.

7.2 Where pre-Bid meeting is held, details of such meeting are given in the BDS

B. Bidding Documents

8 Sections of Bidding Documents

8.1 The Bidding Document consists of Parts 1, 2 and 3, which includes all Sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB Clause 10

PART 1 Bidding Procedures

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation and Qualification Criteria (EQC)
- Section 4 Bidding Forms
- Section 5 Eligible Countries
- Section 6 Corruption and Fraud

PART 2 Schedule of Requirements

- Section 7(A) – Scope of Works (SOW)
- Section 7(B) – Bill of Quantities (BOQs) (or Activity Schedule)
- Section 7(C) – Drawings
- Section 7(D) – Technical Specifications (TS)

PART 3 Contract

- Section 8 General Conditions of Contract (GCC)
- Section 9 Special Conditions of Contract (SCC)
- Section 10 Contract Forms

8.2 The Invitation to Bid is not part of the Bidding Document.

8.3 The Procuring and Disposing Entity is not responsible for the completeness of the Bidding Documents and their addenda if they were not obtained directly from the Procuring and Disposing Entity. A Bidding Document which was not obtained directly from the Procuring and Disposing Entity shall be rejected during evaluation. Where a Bidding Document is obtained from the Procuring and Disposing Entity on a Bidder's behalf, the Bidder's name must be registered with the Procuring and Disposing Entity at the time of sale and issue.

8.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents.

8.5 Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the Bid.

9 Clarification of Bidding Documents

- 9.1 A prospective Bidder requiring any clarification of the Bidding documents shall c the Procuring and Disposing Entity in writing at the Procuring and Disposing Entity's address indicated in the BDS.
- 9.2 The Procuring and Disposing Entity will respond in writing to any request for clarification, provided that such request is received no later than fourteen (14) days prior to the deadline for submission of Bids indicated in the BDS.
- 9.3 The Procuring and Disposing Entity shall forward copies of its response to all Bidders who have acquired the Bidding Document directly from it, including a description of the inquiry but without identifying its source.
- 9.4 Where a Procuring and Disposing Entity determines that it is necessary to amend the Bidding Document as a result of a clarification given under this paragraph, it shall amend the Bidding Document following the procedure under clause 10 and sub-clause 23.2.

10 Amendment to Bidding Documents

- 10.1 At any time prior to the deadline for submission of Bids, the Procuring and Disposing Entity may amend the Bidding Document by issuing an addendum.
- 10.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all Bidders who obtained the Bidding Document directly from the Procuring and Disposing Entity.
- 10.3 To give Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Procuring and Disposing Entity may, at its discretion, extend the deadline for the submission of Bids, pursuant to clause 23.2.

C. Preparation of Bids

11. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring and Disposing Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process

12. Language of Bid and Communications

- 12.1 All communication in the Bidding process shall be in English and in writing unless otherwise specified in the BDS.
- 12.2 The Bid including correspondence and documents relating to the Bid exchanged by the Bidder and the Procuring and Disposing Entity, shall be written in English unless otherwise specified in the BDS.

- 12.3 Supporting documents and printed literature which are part of the Bid may be in another language provided that the documents are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

13 Documents Comprising the Bid

The Bid shall comprise the following:

- (a) Bid Submission sheet;
- (b) Bid Security or Bid Securing Declaration;
- (c) Priced Bill of Quantities or Activity Schedule;
- (d) Qualification Information;
- (e) Alternative Bids, if permissible;
- (f) written confirmation authorising the signatory of the Bid to commit the Bidder;
- (g) documentary evidence TB Clause 18 establishing the Bidder's eligibility to Bid;
- (h) Environmental, Social, Health and Safety Performance Declaration;
- (i) any other document required in the BDS.

14 Bid Submission sheet and Price Schedules

- 14.1 The Bidder shall submit the Bid Submission sheet using the form furnished in Section 4, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested as follows—

- 14.4 A Bidder shall submit the Bid Submission Sheet using the form in Section 4, Bidding Forms. The form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested, as follows—

- (a) the reference of the Bidding Document and the number of each addendum received;
- (b) a brief description of the Goods, Works and Services offered;
- (c) the total Bid price, based on the estimated quantities specified in Section 7, Statement of Requirements;
- (d) any discounts offered and the methodology for their application;
- (e) the period of validity of the Bid;
- (f) a commitment to submit any Performance Security required and the amount;
- (g) a declaration of nationality of the Bidder;

- (h) a declaration that the Bidder, including all parties comprising the Bidder, is not participating, as a Bidder, in more than one Bid in this Bidding process; except for alternative Bids in accordance with clause 13;
- (i) confirmation that the Bidder has not been suspended by the Authority;
- (j) the names and addresses of the Directors and Beneficial owners of the Bidder;
- (k) a declaration on gratuities and commissions; and
- (l) an authorised signature of the Bidder.

14.2 The Bidder shall submit the Price Schedules for Goods, Works, or Services, using the format provided in Section 4, Bidding Forms. The Price Schedule shall include—

- (a) the item number;
- (b) a brief description of the Goods, Works or Services;
- (c) their country of origin and percentage of Malawi content;
- (d) the quantity, which shall be the estimated quantity ;
- (e) the unit prices;
- (f) customs duties and all taxes paid or payable in Malawi;
- (g) the total price per item;
- (h) subtotals and totals per Price Schedule; and
- (i) an authorised signature.

15 Alternative Bids

15.1 Alternative Bids shall not be considered unless otherwise indicated in the BDS.

15.2 Where permitted, alternative Bids may not conform precisely to the Statement of Requirements, but shall at least—

- (a) meet the objectives and performance requirements prescribed in the Statement of Requirements;
- (b) be substantially within any delivery or completion schedule, budget or other performance parameters stated in the solicitation document; and
- (c) clearly state the benefits of the alternative Bid over any solution which conforms precisely to the Statement of Requirements, in terms of technical performance, price, operating costs or any other benefit.

15.3 A Bidder may submit both a main Bid which conforms precisely to the Statement of Requirements and an alternative Bid.

15.4 Where a Bidder submits more than one Bid, each Bid shall be submitted as a complete separate Bid and shall conform to the instructions for preparation and submission of Bids, without any reliance on any other Bid. Each Bid shall be separately signed, authorized, sealed, labelled and submitted in accordance with the instructions for submission of Bids and shall be accompanied by a separate Bid Security or Bid Securing Declaration, if so required. Such Bids shall be labelled "Main Bid" and "Alternative Bid".

15.5 The evaluation of alternative Bids shall use the same methodology, criteria and weights as the evaluation of main Bids, except that the detailed technical evaluation shall take into account only the objectives and/or performance requirements prescribed in the Statement of Requirements.

16 Bid Prices and Discounts

16.1 The Contract will be an Admeasurement or Lump Sum Contract, as indicated in the BDS.

16.2 The Contract shall be for the whole Works, as described in ITB Clause 1.1, based on the:

- (a) priced Bill of Quantities submitted by the Bidder in the case of an Admeasurement Contract; or
- (b) priced Activity Schedule submitted by the Bidder in the case of a Lump Sum Contract.

16.3 The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities (or in the case of a lump sum contract, for all items of the Works described in the drawings and specifications and listed in the Activity Schedule). Items for which no rate or price is entered by the Bidder will not be paid for by the Procuring and Disposing Entity when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities or Activity Schedule.

16.4 All duties, taxes, PPDA and other levies payable by the Contractor under the Contract, or for any other cause as of the date twenty-eight (28) days prior to the deadline for submission of Bids, shall be included in the rates, prices, and total Bid price (or in the case of a lump sum contract, in the total Bid price) submitted by the Bidder.

16.5 Construction levies and all other levies payable by the contractor under the contract shall be included in the rates, prices, and total Bid price (or in the case of a lump sum contract, in the total Bid price) submitted by the Bidder.

16.6 The rates and prices (or in the case of a lump sum contract, the lump sum price) quoted by the Bidder shall not be subject to adjustment during the performance of the Contract unless provided for in the BDS and SCC and the provisions of Clause 42 of the Conditions of Contract. The Bidder shall submit with the Bid all the information required under the SCC and General Conditions of Contract (GCC).

17 Currencies of Bid

17.1 Bid prices shall be quoted in the following currencies—

- (a) for Goods, Works and Services originating in Malawi, the Bid prices shall be quoted in Malawi Kwacha unless otherwise specified in the BDS; and
- (b) for Goods, Works and Services originating outside Malawi, or for imported parts or components of Goods originating outside Malawi, the Bid prices shall be quoted in Malawi Kwacha unless otherwise specified in the BDS.

17.2 The Procuring and Disposing Entity may request that prices quoted be expressed in the currency specified in the BDS. If the Bidder wishes to be paid in a currency or a combination of currencies different from the one in which it was requested to express its quotation, it shall as part of its offer—

- (a) indicate its requirement to be paid in other currencies, including the amount in each currency or the percentage of the quoted price corresponding to each currency;
- (b) justify, to the Procuring and Disposing Entity's satisfaction, the requirement to be paid in the currencies requested; and
- (c) utilise the rate of exchange specified by the Procuring and Disposing Entity to express its offer in the currency required by the Procuring and Disposing Entity. The source, date, and type of exchange rate to be used is indicated in the BDS and shall not precede the Bid submission deadline by less than twenty (20) days.

18 Documents establishing the eligibility of the Bidder

To establish their eligibility in accordance with ITB Clause 4, a Bidder shall complete the eligibility declarations in the Bid Submission Sheet, included in Section 4, Bidding Forms, and submit the documents required in Section 3, Evaluation Methodology and Criteria.

19 Period of Validity of the Bids

- 19.1 Bids shall remain valid for the period specified in the BDS after the date of the Bid submission deadline prescribed by the Procuring and Disposing Entity. The Procuring and Disposing Entity shall reject a Bid valid for a shorter period as non-responsive.
- 19.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Procuring and Disposing Entity may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing.
- 19.3 If a Bid Security or Bid Securing Declaration is requested in accordance with clause 20 (a) or (b), it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. Similarly, a Bidder who submitted a Bid Securing Declaration may refuse the request without being penalized. A Bidder accepting the request shall not be required or permitted to modify its Bid.

20 Bid Security and Bid Securing Declaration

(a) Bid Security

20.1 Unless otherwise specified in the BDS, the Bidder shall furnish, as part of its Bid, a Bid Security in original form and the amount and currency specified in the BDS.

20.2 The Bid Security shall be in any of the following forms—

- (a) a demand guarantee;
- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) any other security indicated in the BDS,

from a reputable source from an eligible country. The Bid Security shall be submitted either using the Bid Security Form included in Section 4, Bidding Forms, or in another substantially similar format. In either case, the form shall include the complete name of the Bidder.

20.3 The Bid Security shall be valid for twenty-eight days after the end of the validity period of the Bid. This shall also apply if the period for Bid validity is extended.

20.4 The Procuring and Disposing Entity shall reject, as non-compliant, any Bid that is not accompanied by a substantially responsive Bid Security, if a Bid Security is required in accordance with clause 20.1.

20.5 Bid Securities for both successful and unsuccessful Bidders shall be returned as promptly as possible once the successful Bidder has signed the Agreement and furnished any required Performance Security.

20.6 The Bid Security may be forfeited—

- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Bid Submission Sheet; or
- (b) if the successful Bidder fails to—
 - (i) sign the Agreement in accordance with clause 46;
 - (ii) furnish any Performance Security in accordance with clause 45; or
 - (iii) accept the correction of its Bid price

(b) Bid Securing Declaration

20.7 Unless otherwise specified in the BDS, a Bidder shall furnish as part of its Bid, a Bid Securing Declaration in original form and in the manner specified in the BDS.

20.8 The Bid Securing Declaration is an alternative to the Bid Security.

20.9 The Bid Securing Declaration shall be submitted using the Form included in Section 4 of the Bidding Document.

20.10 The Bid Securing Declaration shall be valid for twenty-eight days after the end of the validity period of the Bid. This shall also apply if the period for Bid validity is extended.

20.11 A Bid shall be rejected as non-compliant if the Bid is not accompanied by a substantially responsive Bid Securing Declaration, if one is required in accordance with clause 20.1.

20.12 The punitive measures of the Bid Securing Declaration shall be applied if the successful Bidder—

- (i) withdraws its Bid before opening deadline;
- (ii) fails to sign the Agreement in accordance with clause 46; or
- (iii) fails to accept the correction of its Bid price.

21 Format and Signing of Bid

21.1 A Bidder shall prepare one original of the documents comprising the Bid as per ITB Clause 13 and clearly mark it "ORIGINAL." In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

21.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization shall be typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be signed or initialled by the person signing the Bid.

21.3 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the Bid.

D. Submission and Opening of Bids

22 Sealing and Marking of Bids

22.1 A Bidder shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes containing the original and the copies shall then be enclosed in one single plain envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected.

22.2 The inner and outer envelopes shall—

- (a) bear the name and address of the Bidder;

(b) be addressed to the Procuring and Disposing Entity in accordance with clause 23.1;

(c) bear the Procurement Reference number of this Bidding process; and

(d) bear a warning not to open before the time and date for Bid opening, in accordance with clause 26.1.

22.3 If all envelopes are not sealed and marked as required, the Procuring and Disposing Entity will assume no responsibility for the misplacement or premature opening of a Bid.

23 Deadline for Submission of Bids

23.1 Bids must be received by the Procuring and Disposing Entity at the address specified in ITB Clause 22.2(a) no later than the time and date specified in the BDS.

23.2 The Procuring and Disposing Entity may, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with clause 10, in which case all rights and obligations of the Procuring and Disposing Entity and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

24 Late Bids

24.1 The Procuring and Disposing Entity shall not consider any Bid that is submitted after the deadline for submission of Bids, in accordance with clause 23.

24.2 A Bid received by the Procuring and Disposing Entity after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

25. Modification, Substitution and Withdrawal of Bids

25.1 A Bidder may modify, substitute, or withdraw its Bid after it has been submitted at any time before the deadline for submission of Bids by sending a written notice, duly signed by an authorized representative, which shall include a copy of the authorization in accordance with clause 21.2. Any corresponding replacement of the Bid shall accompany the respective written notice. All notices shall be—

(a) submitted in accordance with clauses 21 and 2 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "MODIFICATION", "SUBSTITUTION" OR "WITHDRAWAL,"; and

(b) received by the Procuring and Disposing Entity prior to the deadline prescribed for submission of Bids, in accordance with clause 23.

25.2 Bids requested to be withdrawn in accordance with sub-clause 25.1 shall be returned unopened to the Bidders.

25.3 No Bid may be modified, substituted, or withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Bid Submission Sheet or any extension thereof.

25.4 Bids may only be modified by withdrawal of the original Bid and submission of a replacement Bid in accordance with sub-clause 25.1. Modifications submitted in any other way shall not be considered in the evaluation of Bids.

26 Bid Opening

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

26.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened but returned to the Bidder.

26.3 No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorisation to request the withdrawal and is read out at the Bid opening

26.4 All other envelopes including those marked "REPLACEMENT" shall be opened and the relevant details read out. Replacement Bids shall be recorded as such on the record of the Bid opening. Only envelopes that are opened and read out at the Bid opening shall be considered further.

26.5 Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorisation to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.

26.6 The Procuring and Disposing Entity shall prepare a record of the Bid opening that shall include, as a minimum—

(a) the name of the Bidder and whether there is a modification, substitution, or withdrawal;

(b) the Bid Price, per lot if applicable, including any discounts; and

(c) the presence or absence of a Bid Security or Bid Securing Declaration, if one was required.

26.7 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 immediately after opening, be distributed to Bidders upon request or published on the website of the Procuring and Disposing Entity within one working day from the date of the Bid opening.

27 Evaluation of Bids

- 27.1 Information relating to the examination, evaluation, comparison, and post-qualification of Bids, and recommendations for the award, shall not be disclosed to a Bidder or any other persons not officially concerned with such process until the information on Agreement award is communicated to all Bidders.
- 27.2 Any effort by a Bidder to influence the Procuring and Disposing Entity's in the examination, evaluation, comparison, and post-qualification of the Bids or agreement award decisions shall result in the rejection of its Bid.
- 27.3 Notwithstanding clause 27.2, from the time of Bid opening to the time of Agreement award, if any Bidder wishes to contact the Procuring and Disposing Entity on any matter related to the Bidding process, it should do so in writing

28..Clarification of Bids

- 28.1 To assist in the examination, evaluation, comparison and post-qualification of the Bids, the Procuring and Disposing Entity may, ask any Bidder for a clarification of its Bid.
- 28.2 Any clarification submitted by a Bidder that is not in response to a request by the Procuring and Disposing Entity shall not be considered. The Procuring and Disposing Entity's request for clarification and the response shall be in writing.
- 28.3 No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring and Disposing Entity in the evaluation of the Bids, in accordance with clause 30.2

29. Compliance and Responsiveness of Bids

- 29.1 The Procuring and Disposing Entity's determination of a Bid's compliance and responsiveness shall be based on the contents of the Bid.
- 29.2 A substantially compliant and responsive Bid shall be one that conforms to all the terms, conditions, and specifications of the Bidding Documents 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 Goods, Works and Services specified in the Agreement;
 - (b) limits in any substantial way, inconsistent with the Bidding Document, the Procuring and Disposing Entity's rights or the Bidder's obligations under the Agreement; or
 - (c) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially compliant and responsive Bids.

- 29.3 If a Bid is not substantially compliant and responsive to the Bidding Document, it shall be rejected by the Procuring and Disposing Entity and may not subsequently be made compliant and responsive by the Bidder by correction of the material deviation, reservation, or omission.

30. Nonconformities, Errors and Omissions

- 30.1 Where a Bid is substantially compliant and responsive, the Procuring and Disposing Entity may waive any non-conformity or omissions in the Bid that does not constitute a material deviation.
- 30.2 Where a Bid is substantially compliant and responsive, the Procuring and Disposing 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 Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 30.3 Where a Bid is substantially compliant and responsive, the Procuring and Disposing Entity shall rectify nonmaterial nonconformities or omissions. After the rectification, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The cost of any missing items will be added to the Bid price using the highest price from other Bids submitted.
- 30.4 Where a Bid is substantially compliant and responsive, the Procuring and Disposing Entity shall correct arithmetic 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 and Disposing 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.
- 30.5 Where the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be rejected and its Bid Security may be forfeited. In the same manner, if the lowest evaluated Bidder submitted a Bid Securing Declaration to secure its Bid, the Authority may suspend it.

31. Preliminary Examination of Bids

- 31.1 The Procuring and Disposing Entity shall examine all legal documents and other information submitted by Bidders to verify the eligibility of Bidders and Goods, Works and Services in accordance with clauses 4 and 5.
- 31.2 If after the examination of eligibility, the Procuring and Disposing Entity determines that the Bidder's Goods, Works and Services are not eligible, the Procuring and Disposing Entity shall reject the Bid.
- 31.3 The Procuring and Disposing Entity shall examine the Bids to confirm that all documents and technical documentation requested in clause 8 have been provided, and to determine the completeness of each document submitted.
- 31.4 The Procuring and Disposing Entity shall confirm that the documents listed in this clause and information have been provided in the Bid. If any of these documents or information is missing, the offer shall be rejected.
- (a) the Bid Submission Sheet, including—
 - (i) a brief description of the Goods, Works and Services offered;
 - (ii) the price of the Bid; and
 - (iii) the period of validity of the Bid;
 - (b) the Price Schedule;
 - (c) written confirmation of authorisation to commit the Bidder; and
 - (d) a Bid Security or a Bid Securing Declaration, if applicable

32. Detailed Technical Evaluation

- 32.1 The Procuring and Disposing Entity shall examine a Bid to confirm that a Bidder, without any material deviation or reservation, has accepted all terms and conditions specified in the Terms of Agreement and the Special Terms of Agreement.
- 32.2 If, after the examination of the terms and conditions, the Procuring and Disposing Entity determines that the Bid is not substantially responsive in accordance with clause 29, the Procuring and Disposing Entity shall reject the Bid.
- 32.3 The Procuring and Disposing Entity shall evaluate the technical aspects of the Bid submitted in accordance with clause 18, to confirm that all requirements specified in Section 7, Statement of Requirements of the Bidding Document, have been complied with, without any material deviation or reservation.
- 32.4 If, after the technical evaluation, the Procuring and Disposing Entity determines that the Bid is not substantially responsive in accordance with clause 30, it shall reject the Bid.

33 Currency for Bid Evaluation

In accordance with Clause 17, Bids shall be evaluated in Malawi Kwacha.

34 Preference Margins

- 34.1 A Procuring and Disposing Entity shall apply a margin of preference in works. Where a Preference applies the details shall be provided in Section 3 Evaluation Methodology and Criteria
- 34.2 The Procuring and Disposing Entity shall apply the margin of preference for micro, small and medium enterprises and marginalised groups in accordance with the MSME Order or Bidders qualified for Preferential Treatment as specified in the BDS. If so indicated, Bid Evaluation shall be undertaken in accordance with the procedures and criteria specified in Section 3, Evaluation and Qualification criteria
- 34.3 The Procuring and Disposing Entity shall set aside certain procurement requirements for micro, small and medium enterprises and marginalised groups by restricting Bidding to those enterprises in accordance with MSME Order
- 34.4 The Procuring and Disposing Entity shall state in the BDS all procurement that have been set aside for micro, small and medium enterprises
- 34.5 In the event that the procurement is not contained in the Schedule under the MSME Order, the PDE may reserve some portions of procurement for award to MSMEs and marginalised groups. Such reservations shall be specified in the BDS
- 34.6 The Procuring and Disposing Entity shall set aside certain procurement requirements by restricting Bidding to those enterprises that qualify in accordance with any Preferential Treatment Regulations issued under the Public Procurement and Disposal of Public Assets Act 2017
- 34.7 The Procuring and Disposing Entity may reserve some portions of procurements for award to Bidders qualified under the Preferential Treatment Regulations issued under the Public Procurement and Disposal of Public Assets Act 2017. Such reservations shall be specified in the BDS in accordance with the Regulations
- 34.8 A Bidder shall be eligible to participate in the Bidding process as a qualified Bidder under the Preferential Treatment Regulations issued under the Public Procurement and Disposal of Public Assets Act 2017 or MSME only if it furnishes the Procuring and Disposing Entity or the Authority, as the case may be evidence, proving eligibility in accordance with relevant Regulations or the Order

35 Detailed Evaluation

- 35.1 The Procuring and Disposing Entity shall evaluate each Bid that has been determined, up to this stage of the evaluation, to be substantially responsive.

- 35.2 To evaluate a Bid, the Procuring and Disposing Entity shall use all the criteria and methodologies defined in this Clause and in Section 3, Evaluation and Qualification Criteria. No other criteria or methodology shall be permitted
- 35.3 The Procuring and Disposing Entity's cost evaluation of a Bid may require the consideration of other factors, in addition to the Bid Price quoted. These factors may be related to the characteristics, performance, and terms and conditions of execution of the works. The factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids as specified in Section 3, Evaluation and Qualification Criteria. The factors to be used and the methodology of application shall be indicated in Section 3, Evaluation and Qualification Criteria
- 35.4 If these Bidding Documents allow Bidders to quote separate prices for different lots, and the award to a single Bidder of multiple lots, the methodology of evaluation to determine the lowest evaluated lot combinations, including any discounts offered in the Bid Submission Sheet, is specified in the BDS and detailed in Section 3 Evaluation Methodology and Criteria

36 Financial Evaluation

- 36.1 The Procuring and Disposing Entity shall financially evaluate each Bid that has been determined, up to this stage of the evaluation, to be substantially compliant and responsive.
- 36.2 To financially evaluate a Bid, the Procuring and Disposing Entity shall only use the criteria and methodologies defined in this Clause and in Section 3, Evaluation Methodology and Criteria. No other criteria or methodology shall be permitted.
- 36.3 The Procuring and Disposing Entity's financial comparison of Bids may require the consideration of factors other than costs, in addition to the Bid price quoted. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods, Works and Services. The factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise specified in Section 3, Evaluation Methodology and Criteria. The factors to be used and the methodology of application shall be indicated of Section 3, Evaluation Methodology and Criteria.
- 36.4 To financially compare Bids, the Procuring and Disposing Entity shall—
- (a) determine the Bid price, taking into account the costs listed in Section 3, Evaluation Methodology and Criteria;
 - (b) correct arithmetic errors in accordance with ITB Clause 30
 - (c) price adjustment due to discounts offered
 - (d) make adjustments for any nonmaterial nonconformities and omissions
 - (e) apply any non-cost factors
 - (f) convert all Bids to a single currency
 - (g) apply any margin of preference
 - (h) determine the total evaluated price of each Bid.

37 Comparison of Bids

The Procuring and Disposing Entity shall compare all substantially responsive Bids to determine the lowest evaluated Bid, in accordance with ITB Clause 35.

38 Environmental and Social-economic Policies

- 38.1 Bidders shall be evaluated taking into account compliance with Environmental protection, policies, laws and regulations applicable in Malawi for sustainable development.
- 38.2 The Procuring and Disposing Entity may specify in its evaluation criteria, a method to determine or assess how Bidders promote general as well as specific policies and programmes for sustainability and environmental protection.
- 38.3 A Bidder shall be evaluated taking into account compliance with Child Labour, child protection policies, laws and regulations applicable in Malawi.
- 38.4 The Procuring and Disposing Entity may specify in its evaluation criteria, a method to determine or assess how Bidders should show compliance with Child Labour and Unfair Labour Practices general laws and regulations as well as specific policies and programmes for protection of children from any form of child labour and adherence to applicable fair labour practices.

39 Post-Qualification of the Lowest Evaluated Bidder

- 38.1 The Procuring and Disposing Entity shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive Bid is qualified to perform the Contract satisfactorily
- 38.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 18, to clarifications in accordance with ITB Clause 28 and the qualification criteria indicated in Section 3, Evaluation and Qualification Criteria. Factors not included in Section 3 shall not be used in the evaluation of the Bidder's qualification
- 38.3 The Procuring and Disposing Entity shall, in its own discretion, conduct due diligence on certain procurements. In doing so, it shall prepare its own budget for such an activity and shall not rely or depend on the resources of the Bidder. Due diligence reports shall form part of the evaluation data used by the evaluation teams or Internal Procurement and Disposal Teams when making decisions
- 38.4 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Procuring and Disposing Entity shall proceed to the next lowest evaluated Bid to make a similar determination of that Bidder's capabilities to perform satisfactorily

40 Procuring and Disposing Entity's Right to Accept any Bid, and to Reject Any or All Bids

The Procuring and Disposing Entity reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders

E. Award of Contract

41 Award Criteria

Subject to Clause 36, the Procuring and Disposing Entity will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid price.

42 Procuring and Disposing Entity's Right to Vary Quantities at Award

At the time the Contract is awarded, the Procuring and Disposing Entity reserves the right to increase or decrease the quantity of Works and Related Goods/ Services originally specified in Section 7, Statement of Requirement, provided this does not exceed the percentages indicated in the BDS, and without any change in the unit prices or other terms and conditions of the Bid and the Bidding Documents.

43 Notice of Intention to Award the Contract, Notice of Acceptance, and Contract Negotiations

- 43.1 Prior to expiry of the period of Bid validity, where the works contract is below the threshold for publication of an intention to award a contract, the Procuring and Disposing Entity shall notify the successful Bidder, in writing, that its Bid has been accepted. At the same time, the Procuring and Disposing Entity shall also notify all other Bidders of the results of the Bidding. The notice of acceptance shall not be sent until all the necessary approvals have been obtained.
- 43.2 Prior to expiry of the period of Bid validity, the Procuring and Disposing Entity shall publish a notice of intention to award in two widely circulated newspapers and on the Authority's website for a period of fourteen (14) days for any procurement contract in accordance with the threshold set by the Director General before signing the contract.
- 43.3 Prior to the signing of the contract but after the completion of intention to award proceedings, the Procuring and Disposing Entity may enter into negotiations with the successful Bidders on the modalities for the execution of the contract not changing the material factors of the contract.

44 Performance Security

- 44.1 Within thirty (28) days of receipt of notification of award from the Procuring and Disposing Entity, the successful Bidder shall furnish the performance security included in Section 10, Contract Forms, or any other form acceptable to the Procuring and Disposing Entity, in accordance with the SCC

- 44.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for annulment of the award and forfeiture of the Bid security. In that event, the Procuring and Disposing Entity may award the Contract to the next lowest evaluated Bidder

45 Signing the Contract

- 45.1 Promptly after notification or after the elapsing of the fourteen (14) days of the still period, the Procuring and Disposing Entity shall send the successful Bidder the Contract documents
- 45.2 Within thirty (30) days of receipt of the Contract documents, the successful Bidder shall sign, date, and return the Contract documents to the Procuring and Disposing Entity to finalise the signing process

46 Settlement of Disputes

- 46.1 In the event of a dispute arising out of the performance of the contract by either party, such disputes shall be resolved amicably. Should amicable dispute resolution fail, the matter shall be taken to arbitration, depending on the agreement by two parties. However, should arbitration still not yield positive results to either party, either party so wronged shall take the matter to the local courts.
- 46.2 For purposes of this Contract, the Procuring and Disposing Entity proposes the person named in the BDS to be appointed as Adjudicator under the Contract, at an hourly fee specified in the BDS, plus reimbursable expenses. If the Bidder objects to the Adjudicator proposed by the Procuring and Disposing Entity, he should so state in his Bid, and present an alternative candidate, together with the candidate's daily fees and biographical data
- 46.3 If, in the Notice of Acceptance, the Procuring and Disposing Entity and Bidder have not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by the Appointing Authority designated in the SCC at the request of either party

Section 2. Bid Data Sheet

Section 2. Bid Data Sheet

Instructions to Bidders (ITB) reference	Data relevant to ITB
A. General	
ITB 1.1, 2.1	The Procuring and Disposing Entity is: Roads Authority The number and identification of Lots in this Bidding Document is: 1
ITB 1.1; 22.2(b)	The subject of the procurement is: Construction of Lubeya Box Culvert Across Lubeya River Between Euthini and Chiseng'eze (M09) Road in Mzimba District Project ID: MP-2-01 Procurement Reference Number is: RA/MAI/2025-26/T/BR/NR/MZ/38
ITB 8.2	The Procuring and Disposing Entity Shall Not hold a pre-Bid meeting and/or site visit. If a pre-Bid meeting and/or site visit is to be held, it shall take place at: Location: NA Date: NA Time: NA
B. Bidding Documents	
ITB 10.1	For <u>clarification purposes</u> only, the Procuring and Disposing Entity's address is: Attention: Regional Manager Street Address: Off M01 at Mzuzu Admarc to NOCMA Fuel Reserves Name of Building: Roads Authority Offices-North Floor/Room number: Town/City: Mzuzu Postal Address: P O Box 20050 Tel: +265 1 311 065, +265 888 355 895 Malawi Email address: fmkandawire@ra.org.mw / ipc@ra.org.mw Deadline date for request for clarifications is: 7 days prior to the submission date

Instructions to Bidders (ITB) reference	Data relevant to ITB
C. Preparation of Bids	
ITB 13 (i)	<p>The Bidder shall submit with its Bid the following additional documents:</p> <ol style="list-style-type: none"> Code of Conduct for Contractor's Personnel (ES) <p>The Bidder shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub-Clause 1.1.17 of the General Conditions of Contract), to ensure compliance with the Contractor's Environmental and Social (ES) obligations under the Contract.</p> <p>Bidders Shall complete and include the risks to be addressed by the Code in accordance with section VII- Works' Requirements, e.g. risks associated with: labour influx, Spread of communicable diseases, sexual harassment, gender based violence, sexual exploitation and abuse, illicit behaviour and crime and maintaining a safe environment.</p> <p>In addition the Bidder shall detail how the code of conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the contractor proposes to deal with any breaches.</p> <p>The Contractor shall be required to implement the agreed Code of conduct</p> Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks <p>The Bidder shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks in alignment with the project ESIA/ESMP.</p> <ul style="list-style-type: none"> Traffic Management Plan to ensure safety of local communities and passengers from construction traffic Water Resource Protection Plan to prevent contamination of drinking water; Strategy to avoid and manage waste generation; General strategy to avoid creation of noise nuisance, vibration and air pollution (due to e.g. dust); A Grievance Redress Mechanism for the project

Instructions to Bidders (ITB) reference	Data relevant to ITB
	<ul style="list-style-type: none"> Boundary Marking and Protection Strategy for mobilization and construction to prevent offsite adverse impacts; Strategy for obtaining Consents/Permits prior to the start of relevant works such as opening a quarry or borrow pit; Strategy to manage occupational health and safety, incl. HIV prevention measures for contractor's staff/workers and a grievance mechanism for workers to raise workplace related concerns; Strategy to manage community health and safety incl. Gender Based Violence, Sexual Exploitation and Abuse, Child Labour and Violence Against Children prevention and response plan; HIV/STIs prevention plan; conflict resolution; Strategy to ensure recruitment of locals and inclusion of youth and women in employment opportunities <p>The Contractor shall be required to submit for approval, and subsequently implement, the Contractor's Environmental and Social Management Plan (C-ESMP), in accordance with the Particular Conditions of Contract Sub-Clause 4.1, that includes the agreed Management Strategies and Implementation Plans described here.</p>
ITB 15.1	Alternative Bids shall not be permitted considered
ITB 16.1	The Contract is Admeasurement .
ITB 16.6	Bid Prices will not be subject to adjustment during performance of the contract.
ITB 19.1	Bids shall remain valid for 120 days.
ITB 20.2	<p>Bid Security shall not be required.</p> <p>Where a Bid Security is required, the amount of the Bid security shall be [insert amount] in Malawi Kwacha.</p>
ITB 20.3	<p>A Bid Securing Declaration shall be required.</p> <p>Where a Bid Securing Declaration is required no alteration to Bid Securing Declaration Form in Section 4</p>
ITB 22.1	In addition to the original of the Bid, the number of copies is: 1
D. Bid Submission	

Instructions to Bidders (ITB) reference	Data relevant to ITB
ITB 23.2(a)	<p>For Bid submission purposes only, the Procuring and Disposing Entity's address is :</p> <p>Attention: Regional Manager (N)</p> <p>Street Address: Off M01 at Mzuzu Admarc to NOCMA Fuel Reserves</p> <p>Name of Building: Roads Authority Offices-North</p> <p>Floor/Room number:</p> <p>Town/City: Mzuzu</p> <p>Postal Address/Post Code: P O Box 20050</p>
ITB 23.1	<p>The deadline for Bid submission is:</p> <p>Date: 22nd September 2025 Time: 10:00 Hours Central African Time</p>
ITB 26.1	<p>The Bid opening shall take place at:</p> <p>Street Address: Off M01 at Mzuzu Admarc to NOCMA Fuel Reserves</p> <p>Name of Building: Roads Authority Offices-North</p> <p>Floor/Room number:</p> <p>Town/City: Mzuzu</p> <p>Date: 22nd September 2025 Time: 10:00 Hours Central African Time</p>
ITB 34.2	<p>A margin of preference Shall apply.</p> <p>A margin of preference for micro, small and medium enterprises and other marginalised groups Shall not Apply</p> <p>A margin of preference for Preferential Treatment Shall not apply</p> <p>Where a margin of preference applies, the criteria for eligibility and the application methodology are described in Section 3 Evaluation Methodology and Criteria</p>
F. Award of Contract	
ITB 46.2	<p>The Adjudicator proposed by the Procuring and Disposing Entity is: Malawi Engineering Institution</p> <p>The hourly fee for this proposed Adjudicator shall be: MWK50,000.00</p> <p>The biographical data of the proposed Adjudicator is as attached to this Bid Data Sheet.</p>

Section 3. Evaluation and Qualification Criteria

Procurement Reference Number: _____

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 and Disposing Entity shall use to evaluate a Bid and determine whether a Bidder has the required qualifications. No other factors, methods or criteria shall be used.

A. Evaluation Methodology**1. Methodology Used**

- 1.1 The evaluation methodology to be used for the evaluation of Bids received shall be the Technical Compliance Selection (TCS) methodology.

2. Summary of Methodology

- 2.1 The evaluation shall be conducted in the following sequential stages –
- (a) A preliminary evaluation to determine the eligibility of Bidders and the administrative compliance of Bids received;
 - (b) A detailed evaluation to determine the technical responsiveness of the eligible and compliant Bids;
 - (c) A financial evaluation to compare costs of the responsive Bids received and thereafter determine the lowest evaluated Bid; and
 - (d) Post qualification to confirm whether the lowest evaluated Bidder has the capacity and resources to effectively execute the procurement. Where applicable, a thorough due diligence should be conducted
- 2.2 Failure of a Bid at any stage of the evaluation shall prevent further consideration at the next stage of evaluation. Substantial responsiveness shall be considered a pass at the detailed evaluation stage.

B. Preliminary Evaluation**3. Eligibility Criteria**

- 3.1. The eligibility requirements shall be determined in accordance with ITB Clause 4
- 3.2. The documentation required to provide evidence of eligibility shall be as prescribed in ITB 4
- 3.3. For inclusion of a provision on Joint Venture, Consortiums and Associations
- a) A certificate of registration issued by the Authority for Bidders currently registered with the Authority or a copy of the Bidder's trading license or equivalent and a copy of the Bidder's certificate of registration or equivalent for Bidders not currently registered with the Authority; and

- b) A statement in the Bid submission sheet that the Bidder meets the eligibility criteria stated in ITB 4.1 and 4.4
- c) A declaration in the Bid submission sheet of nationality of the Bidder
- d) A declaration in the Bid submission sheet that the Bidder is not under suspension by the authority
- e) Fulfillment of obligations to pay taxes where applicable

3.4 For Joint Venture or Consortiums or Associations

- a) A registered Power of Attorney from each member or partner if drawn and signed in Malawi; or a notarized Power of Attorney if drawn and signed outside Malawi, nominating a representative to conduct all business on its behalf during the Bid preparation, Bidding process and contract execution in case of award of the contract
- b) The documentation in Section 3.2 for each member or partner and a copy of the Joint Venture / Consortium / Association Agreement which is legally binding on all partners or members stating that:
 - (i) The partners or members shall jointly submit a Bid;
 - (ii) One of the parties will be nominated as lead member or partner to act for and on behalf of all members or partners;
 - (iii) The authorized representative of the lead member or partner who was granted power of attorney shall sign the Bid;
 - (iv) If the Bid is successful, the contract shall be executed in the name of the Joint Venture (JV), Consortium or Association and each member or partner shall sign the contract agreement; and
 - (v) All partners shall be jointly and severally liable for the implementation of the contract in accordance with the contract terms

3.5 Declaration: Environmental and Social (ES) past performance

A Bidder shall declare any civil work contracts that have been suspended or terminated and/or performance security called by a Client for reasons of breach of environmental, or social (including Sexual Exploitation and Abuse) contractual obligations in the past five years.

4 Administrative Compliance Criteria

- 4.1. The evaluation of Administrative Compliance criteria shall be conducted in accordance with ITB Clause 13.
- 4.2 Eligibility and administrative compliance shall be determined on a pass or fail basis and a Bid which is not eligible or administratively compliant shall be rejected at the preliminary stage of evaluation

C. Detailed Evaluation

5. Assessment of Responsiveness

The assessment of responsiveness will consider the following criteria:

- (a) Acceptance of the conditions of the proposed contract;
- (b) Acceptable completion schedule;
- (c) Acceptability of the proposed program (work method and schedule), including relevant drawings and charts.

6. Mobilization

Evaluation of the responsiveness of a Bid to the technical requirements will include an assessment of the Bidder's capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 7 (Statement of Requirements).

7. Personnel and Equipment

A. Personnel

The Bidder must demonstrate that it will have the key personnel for the following positions that meet the following requirements:

No.	Position	General Work Experience (years)	Experience in Similar Works (years)
1.	<i>Site Agent</i>	2 years with BSc in Engineering or Dip in Engineering or 5 years with Road Foremanship Certificate.	2
2.	<i>Road/Bridge Foreman</i>	3 years with Road Foremanship Certificate	2
3.	<i>Environmental Officer</i>	2 years with BSc in Environmental Science or related discipline	2
4.	<i>Social Development Officer</i>	2 years with BSc in social Sciences or relevant discipline	2

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Forms included in Section 4, Bidding Forms.

B. Equipment

The Bidder must demonstrate that it shall have access to the key equipment listed hereafter (either by ownership, lease or hire): attach documentary evidence of ownership, lease, hire such as registration books, agreements or memoranda or purchase order).

No.	Equipment Type and Description/ Capacity	Minimum required	Number
	1. Excavator	1	
	2. Front End Loader	1	
	3. Roller	1	
	4. Water Bowser	1	
	5. Tipper		
	6. Flat lorry	1	
	7. Concrete Mixer	1	
	8. Concrete Vibrator	1	
	9. Water Pump	1	
	10.Lowbed	1	

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section 4.

8. Qualifications Criteria

- 8.1. The information required from Bidders in ITB Clause 5.3 is modified as follows:
- 8.2. The requirements for joint ventures in ITB Clause 5.3 are modified as follows:
- 8.3. To qualify for award of the Contract, in accordance with ITB Clause 5.3, Bidders shall meet the following minimum qualifying criteria:
 - (a) average annual volume of construction work over the past 3 Years of at least MK180,000,000.00 (Attach completion certificates for the works performed);
 (All the contracts contributing to the average annual volume for each year must be listed and attached with backups. A completion certificate is required to back up each completed listed project or notice of acceptance letters and latest interim payment certificate from clients for works in progress above 70% completion)
 - (b) experience as prime contractor in the construction of at least 2 works of a nature and complexity equivalent to the Works over the last 5 years (to comply with this requirement, works cited should be at least seventy (70) percent complete);

No	Nature of Works	Requirement for similar works
1	Bridges / Repairs of Major Drainage Structures	1. Bridge Construction Contract 2. Rigid pavement Construction Contract 3. Reinforced Concrete Structures Contract 4. Multi storey Buildings Construction Contract 5. Concrete Water Tanks Construction Contract

- (c) Proposals for the timely acquisition (own, lease, hire, etc.) of the following essential equipment:

S/N	Equipment Type and Description/ Capacity	No
1	Excavator	1
2	Front End Loader	1
3	Roller	1
4	Water Bowser	1
5	Tipper	1
6	Flat lorry	1
7	Concrete Mixer	1
8	Concrete Vibrator	1
9	Water Pump	1
10	Lowbed	1

- (d) personnel with the following qualifications and experience:

S/N	Position	Qualification	Total General Experience (no. of years)	Specific Similar Experience ¹
1	1 No Site Agent	BSc in Civil Engineering or Diploma in Civil Engineering or equivalent or a Road Foremanship Certificate <i>(for NCIC, the minimum acceptable certificate is NCIC Level II)</i>	2 years with BSc in Engineering or Dip in Engineering or 5 years with Road Foremanship Certificate.	2 similar projects
2	1 No. Road Foreman	Road Foremanship Certificate <i>(for NCIC, the minimum acceptable certificate is NCIC Level II)</i>	3 years with Road Foremanship Certificate	2 similar projects

¹ Similar construction in this case will be the construction of at least two comparable road projects. These projects should be identified by name, contract number, client and location in the CV of the individual or given in the table of proposed staff alongside the candidate's name

Curriculum Vitae (CV) of staff must be updated (to be signed by the proposed personnel within the last six (6) months before the date of bid submission). Copies of the certificates shall be certified as a true copy of the original. Bidders with unsigned CVs and un-certified copies of certificates shall be disqualified.

- (e) liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of no less than MWK72Million;
 - (f) Subcontracting agreement (clause 4.4 of the General Conditions of Contract) with the proposed subcontractors (the value of works proposed to be subcontracted in line with the contractors' NCIC category).
- 8.4. A consistent history of contract non-performance, litigation or arbitration awards against the Applicant or any partner of a Joint Venture may result in disqualification.
- 8.5. The figures for each of the partners of a joint venture shall be added together to determine the Bidder's compliance with the minimum qualifying criteria in (a) to (e)
- 8.6. for a joint venture to qualify, each of its partners must meet at least twenty-five (25) percent of minimum criteria (a), (b), and (e) for an individual Bidder, and the partner in charge at least forty (40) percent of those minimum criteria. Failure to comply with this requirement will result in rejection of the joint venture's Bid.
- 8.7. Subcontractors' experience and resources will not be taken into account in determining the Bidder's compliance with the qualifying criteria.

9. Participation by Micro, Small and Medium Enterprises

- 9.1 If indicated in the Bid Data Sheet, Bidders for works contracts applying for a margin of preference for participation by micro, small and medium enterprises (MSME) in Bid evaluation shall provide such information, including details of ownership, certificates of registration, certificate of the category within the MSMEs as are necessary to confirm whether a particular contractor or group of contractors qualifies for preference based on being a micro, small and medium enterprise.
- 9.2 A margin of preference may be awarded to established MSME contractors who are registered as Malawian contractors by the National Construction Industry Council, and Ministry of Trade.
- 9.3 The margin of preference for MSMEs shall be applied as follows:

After Bids have been received and reviewed by the Procuring and Disposing Entity, responsive Bids shall be classified into the following groups -

- (a) Group A, namely, Bids offered by MSMEs contractors and joint ventures eligible for the preference.

(b) Group B, namely, Bids offered by other contractors.

For the purpose of evaluation and comparison of Bids only, an amount equal to the percentage, as indicated in the MSME Order, of the Bid amount shall be added to Bids received from contractors in Group B.

Section 4. Bidding Forms

Section 4. Bidding Forms

List of Forms

- Bid Submission Form
- Beneficial Ownership Disclosure Form
- Priced Schedules
- Bid Security Form (Bank Guarantee)
- Bid Securing Declaration
- Advance Payment Security Form
- Qualification Information Forms A to Q
- Unit Rates Analysis Form I
- Environmental, Social, Health and Safety Declaration

Note: All forms, requiring information to be completed by the Bidder in bold in square brackets e.g. **[insert date]** etc.

Note to Bidders: This Bid Submission Form 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.

Bid Submission Form

Date: **[insert date]**

Procurement Reference No.: **[insert procurement reference number]**

Page **[insert page number]** of **[insert total number of pages]** pages

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

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: **[insert the number and issuing date of each Addenda]**;
- (b) We offer to execute the **[insert the name and procurement reference number of the Contract]** in conformity with the Bidding Documents for the Contract Price of **[insert amount in numbers and words]** Malawi Kwacha;
- (c) We offer to execute the works in accordance with the Work Program in conformity with the Bidding Documents for a period not exceeding **[insert number of weeks or months]**
- (d) The advance payment required is: **[insert amount in numbers and words]** Malawi Kwacha;
- (e) Our Bid shall be valid for a period of **[specify the number of days that the Bid is valid for]** calendar days from the date fixed for the Bid submission deadline in accordance with clause 23.1 of the ITB, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) We have no conflict of interest in accordance with clause 4.3 of the ITB;
- (g) Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been debarred from participation in public procurement by the Government of the Republic of Malawi, in accordance with clause 4.4 of the ITB;
- (h) Our firm, its affiliates or subsidiaries, including subcontractors or suppliers for any part of the contract 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 and Disposing Entity.
- (i) The names and physical addresses of the Directors of our firm are provided in the table below:

Name	Address

- (j) The names and physical addresses of the Beneficial Owners our company are provided in the table below:

Name	Address

- (k) We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.
- (l) We accept the appointment of **[insert name of adjudicator proposed in the BDS]** as the Adjudicator. **[or]** We do not accept the appointment of **[insert name of adjudicator proposed in the BDS]** as the Adjudicator and propose instead that **[insert name]** be appointed as Adjudicator, whose daily fees and biographical data are attached.

Signed: **[insert signature of person whose name and capacity are shown]** In the capacity of **[insert legal capacity of person signing the Bid]**

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

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

Dated on _____ day of _____, _____ **[insert date of signing]**

BENEFICIAL OWNERSHIP DISCLOSURE FORM

Date: **[insert date]**

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the Bidder. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- 1. directly or indirectly holding 5% or more of the shares*
- 2. directly or indirectly holding 5% or more of the voting rights*
- 3. directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder.*
- 4. directly or indirectly, has a substantial economic interest in or receives substantial economic benefit from, a company, whether acting alone or together with other persons;*
- 5. has a significant stake in a company and on whose behalf activity of a company is conducted; or*
- 6. exercises significant control or influence over a person through a formal or informal agreement, and where such ownership, control or interest is through a trust, the trustee (s), beneficiaries, or anyone who controls the trust.*

Procurement Reference No.: **[insert procurement reference number]**

Page **[insert page number]** of **[insert total number of pages]** pages

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

In response to your request in the Letter of Acceptance dated [insert date of letter of Acceptance] to furnish additional information on beneficial ownership: [select one option as applicable and delete the options that are not applicable]

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 5% or more of the shares (Yes / No)	Directly or indirectly holding 5 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Bidder (Yes / No)
[include full name (last, middle, first), nationality, country of residence]			

OR

(ii) We declare that there is no Beneficial Owner meeting one or more of the following conditions:

- directly or indirectly holding 5% or more of the shares
- directly or indirectly holding 5% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder.
- directly or indirectly, has a substantial economic interest in or receives substantial economic benefit from, a company, whether acting alone or together with other persons;
- has a significant stake in a company and on whose behalf activity of a company is conducted; or
- exercises significant control or influence over a person through a formal or informal agreement, and where such ownership, control or interest is through a trust, the trustee (s), beneficiaries, or anyone who controls the trust.

OR

(iii) We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]

- directly or indirectly holding 5% or more of the shares
- directly or indirectly holding 5% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]
- directly or indirectly, has a substantial economic interest in or receives substantial economic benefit from, a company, whether acting alone or together with other persons;

- has a significant stake in a company and on whose behalf activity of a company is conducted; or
- exercises significant control or influence over a person through a formal or informal agreement, and where such ownership, control or interest is through a trust, the trustee (s), beneficiaries, or anyone who controls the trust.

Name of the Bidder: [insert **complete name of the Bidder**]²

Name of the person duly authorized to sign the Bid on behalf of the Bidder: [insert **complete name of person duly authorized to sign the Bid**]³

Title of the person signing the Bid: [insert **complete title of the person signing the Bid**]

Signature of the person named above: _____

Date signed [insert **ordinal number**] day of [insert **month**], [insert **year**]

² In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to "Bidder" in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

³ Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Note to Bidders: Bidders shall submit a fully priced Bills of Quantities for Admeasurement Contracts or Activity Schedule for Lump Sum Contracts as provided in Section 7 of the Bidding Documents.

Each page of the Bills of Quantities or the Activity Schedule should be initialled by a person with the proper authority to sign documents for the Bidder.

Priced Schedules

(Bills of Quantities or Activity Schedule)

PREAMBLE TO BILL OF QUANTITIES

- 1.1 This Preamble and the Bill of Quantities form an integral part of the Contract Documents. The Bill of Quantities shall be read in conjunction with the Instruction to Bidders, Conditions of Contract, Technical Specifications, and Drawings.
- 1.2 The quantities given in the Bill of Quantities are estimated and provisional. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineers' Representative and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Supervisors' Representative may fix within the terms of the Contract.
- 1.3 The rates and prices tendered in the priced Bill of Quantities shall, except in-so-far as it is otherwise provided under the Contract, include the cost of all constructional plant, labour, supervision, materials tests for quality control, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 1.4 A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 1.5 The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities. Where no items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related items of work.
- 1.6 General directions and descriptions of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. The bidder is advised to refer to the relevant sections of the contract documentation before entering prices against each item in the priced Bill of Quantities.
- 1.7 Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Supervisors' Representative after obtaining approval of the Employer.
- 1.8 The method of measurement of completed work for payment shall be in accordance with the measurement and payment item in the General and Particular Specifications.

- 1.9 Errors will be corrected by the Employer for any arithmetic errors in computation or summation as follows:
- 1.10 where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
- 1.11 where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate as quoted will govern.
- 1.12 The quantities of material or work stated in the Bill of Quantities shall not be regarded as constituting authorisation to the Contractor to order materials or execute work. The Contractor shall obtain the Supervisors' Representatives' detailed instructions for all work before ordering any materials or executing work or making arrangements therefore.
- 1.13 The short descriptions given of pay items in the Bill of Quantities are only for the purposes of identifying the items and providing specific details. Reference shall be made inter alia to the Drawings, Specifications, and Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.
- 1.14 All rates and sums of money quoted in the Bill of Quantities shall be in Malawi Kwacha.
- 1.15 The Priced Bill of Quantities for the capacity improvement of KIA - Kanengo (M001) shall be priced and summed up.
- 1.16 For the purpose of this Bill of Quantities, the following works shall have the meanings hereby assigned to them:

Unit	The unit of measurement for each item of work as defined in the Project Specifications.
Quantity	The number of units of work for each item.
Rate	The payment per unit of measurement at which the Tenderer tenders to do the work.
Amount	The product of the quantity and the rate tendered for an item.
Lump sum	An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere but the quantity of work of which is not measured in any units.
Prime Cost Sum	A sum included in the Contract and so designated in the Schedule of Quantities for covering the prime cost of goods or materials to be supplied under the Contract and for delivery of such items to storage on site. The amount to be paid to the Contractor shall be the actual price paid by him

- 1.17 The Tenderer shall fill in a rate or a lump sum for each item where provision has been made for it even where no quantities are given. Items against which no rate or lump sum has been entered in the tender will not be paid for when the work is executed, as it is assumed that the contractor does not wish to receive payment for any such work.

The Tenderer shall fill in a rate against all items where the words "rate only" appear in the amount column. The provisions of Subclause 1209(f) of the Standard Specifications shall apply to rate-only items.

The Tenderer shall not group a number of items together and tender one rate or lump sum for such group of items. The Tenderer also shall not indicate against any item that full compensation for such item has been included in another item. The Tenderer may not tender a zero rate for any item, failure to comply with this requirement may result in the tender being rejected.

The tendered lump sums and rates shall be valid irrespective of any change in the quantities during the execution of the Contract.

- 1.18 The works as executed will be measured for payment in accordance with the methods described in the Contract Documents under the various payment items, notwithstanding any custom to the contrary.

Attention is directed to the provisions of Clause 1220 of the Standard Specifications regarding the measurement of quantities for payment. Except where otherwise specified as in Clause 1220, the net measurements or mass of the finished work in place shall be taken for payment but excluding any volume or mass of work in excess of that ordered.

- 1.19 The short descriptions of the payment items given in the Bill of Quantities are only for the purposes of identifying the items and providing specific details. Reference shall be made, inter alia, to the drawings, Standard Specifications, Particular Specifications, General Conditions of Contract and Special Conditions of Contract for more detailed information regarding the extent of the work entailed under each item.

- 1.20 The pay item numbers that appear in the Bill of Quantities refer to the corresponding item numbers in the Standard Specifications. Certain pay item numbers appearing in the Schedule of Quantities are prefixed by the letter PS. This letter signifies that either:

- (a) a new pay item not listed in the Standard Specification has been described and listed in the Particular Specification, or
- (b) an existing measurement and / or payment clause occurring in the Standard Specifications has been clarified and / or modified in the Particular Specifications.

The listing of pay items with or without a PS prefix where relevant has, as stated, been done to assist Bidders and in no way absolves Bidders from the obligation to familiarise themselves with, and bid on the basis of the Documents as a whole. No claim based on errors in or omissions of pay item numbers and / or the prefix PS in the columns headed "Pay Item" in the Bill of Quantities will be considered.

- 1.21 Where a Pay Item has the unit of measurement equal to % the Tenderer must enter the percentage required by him under the "Rate" column, e.g. for 5% enter 5,0 not 0,05.

2. SCHEDULE OF DAY WORK RATES

- 2.1 The Schedule of Day work Rates shall be used to calculate the payment due for work ordered as Day works, and for which no rates appear in the Bill of Quantities.
- 2.2 The description of the work, quality of materials and standard of workmanship shall be as described in the Specification.
- 2.3 The prices quoted in the Schedule shall cover all the necessary insurances, use and maintenance of ordinary plant (e.g. barrows, running planks, hand pumps, hand tools and appliances generally), superintendence, overhead charges and profit, and in the case of mechanically operated plant, the wages of the operator and assistant, consumables, stores, fuel, maintenance and transportation of plant to site.
- 2.4 The time of gangers, overseers, or charge hands working with their gangs, is to be paid for under appropriate items, but the time of Foremen is not to be included. This is to be covered by superintendence. The time actually spent by labour on work shall be recorded for this purpose.
- 2.5 The price quoted for labour shall be for straight time only and no overtime rates shall be payable. Rates shall only be paid for artisans working at their trade.
- 2.6 The rates for materials shall cover distribution within the site. Delivery to the site shall be charged in addition.
- 2.7 The cost of additional watching and lighting and other incidentals specially necessitated by Day works shall not be paid for separately.
- 2.8 The rates given in the Schedules shall be taken to be operative at the time of Bidding.
- 2.9 Day works shall be carried out on the written instructions from the Supervisors' Representative.
- 2.10 The description of the plant should be completed by the Bidder when bidding.

Note to Bidders: This Bid Security should be on the letterhead of the issuing Financial Institution and should be signed by a person with the proper authority to sign the Bid Security. It should be included by the Bidder in its Bid, in accordance with ITB Clause 20. Except for indicated fields, no changes shall be made in this template, any changes made shall result in rejection of the Bid.

Bid Security (Bank Guarantee)

Date: **[insert date]**

Procurement Reference No.: **[insert procurement reference number]**

Page **[insert page number]** of **[insert total number of pages]** pages

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

Whereas **[insert complete name of Bidder]** (hereinafter "the Bidder") has submitted its Bid dated **[insert date (as day, month and year) of Bid submission]** for procurement reference no. **[insert procurement reference no]** for the construction of **[insert name of Contract]**, hereinafter called "the Bid."

KNOW ALL PEOPLE by these presents that WE **[insert complete name of bank issuing the Bid Security]**, of **[insert city of domicile and country of nationality]** having our registered office at **[insert full address of the issuing institution]** (hereinafter "**the Bank**"), are bound unto **[insert complete name of the Procuring and Disposing Entity]** (hereinafter "the Procuring and Disposing Entity") in the sum of **[specify in words the amount and currency of the Bid security (specify the amount and currency in figures)]**, for which payment well and truly to be made to the aforementioned Procuring and Disposing Entity, the Bank binds itself, its successors or assignees by these presents.

Sealed with the Common Seal of this bank, this **[insert day in numbers]** day of **[insert month]**, **[insert year]**.

THE CONDITIONS of this obligation are the following:

1. If the Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Bid Submission Form, except as provided in ITB Clause 21.2; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Procuring and Disposing Entity, during the period of Bid validity, fails or refuses to:
 - (a) execute the Contract; or
 - (b) furnish the Performance Security, in accordance with the ITB Clause 36; or
 - (c) accept the correction of its Bid by the Procuring and Disposing Entity, pursuant to ITB Clause 28.

We undertake to pay the Procuring and Disposing Entity up to the above amount upon receipt of its first written demand, without the Procuring and Disposing Entity having to substantiate its demand, provided that in its demand the Procuring and Disposing Entity state that the amount claimed by it is due to it, owing to the occurrence of one or more of the above conditions, specifying the occurred conditions.

This guarantee shall remain in force up to and including twenty-eight (28) days after the period of Bid validity, as stated in the Bid Submission Form or as it may be extended by the Bidder, notice of which extension(s) to the Bank is hereby waived. Any demand in respect thereof should be received by the Bank no later than the above date.

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

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

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

Dated on _____ day of _____, _____ **[insert date of signing]**

Note to Bidders: This Bid Securing Declaration should be on the letterhead of the Bidder and should be signed by a person with the proper authority to sign the Bid Securing Declaration. It should be included by the Bidder in its Bid, in accordance with ITB Clause 20. Except for indicated fields, no changes shall be made in this template, any changes made shall result in rejection of the Bid.

Bid Securing Declaration

[The Bidder shall fill in this form in accordance with the instructions indicated.]

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

Procurement Reference No.: **[insert number of Bidding process]**

Alternative No.: **[insert identification No. if this is a Bid for an alternative]**

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

We, the undersigned, declare that

- 1 We understand that, according to your conditions, Bids must be supported by a Bid Securing Declaration.
- 2 We accept that we will automatically be debarred from being eligible for Bidding in any contract with the Procuring and Disposing Entity and/or any other government entity for a period of **twenty-four (24) months** starting on the date as may be determined by the Government of Malawi if we are in breach of our obligation(s) under the Bid conditions, because we:
 - (a) have withdrawn our Bid during the period of Bids validity specifies by us in the Bid Data Sheet; or
 - (b) having been notified of the acceptance of our Bid by the Procuring and Disposing Entity during the period of Bid validity, (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB 44; or (iii) fail to accept the correction of its Bid by the Procuring and Disposing Entity, pursuant to ITB Clause 30.
- 3 We understand that this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the Bid.
- 4 We understand that if we are a Joint Venture, the Bid Securing Declaration must be in the

name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of Bidding, the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed: **[insert signature of person whose name and capacity are shown]** In the capacity of **[insert legal capacity of person signing the Bid Securing Declaration]**

Name: **[insert complete name of person signing the Bid Securing Declaration]**

Duly authorized to sign the Bid for and on behalf of **[insert complete name of Bidder]**

Date: on day of,..... **[insert date of signing]**

Note to Bidders: The information to be filled in by Bidders in the following pages will only be used for purposes of post-qualification or for verification of pre-qualification as provided for in Clause 5 of the Instructions to Bidder and will not form part of the Contract. Attach additional pages as necessary. If used for pre-qualification verification, the Bidder should fill in updated information only.

Qualification Information Form A

- | | |
|--|--|
| 1. Individual Bidders or Individual Members of Joint Ventures | <p>1.1 Constitution or legal status of Bidder: [attach copy]</p> <p>Certificate as a Micro, Small or Medium Enterprise: [attach copy, applicable where preference for MSMEs applies]</p> <p>Place of registration: [insert]</p> <p>Principal place of business: [insert]</p> <p>Power of attorney of signatory of Bid: [attach]</p> <p>1.2 Average annual volume of construction work performed in the previous number of years specified in Section 3, Evaluation and Qualification Criteria: [insert details in Form D]</p> <p>1.3 Work performed as prime Contractor on works of a similar nature and volume over the last five (5) years. Also list details of work under way or committed, including expected completion date. [insert details in Forms I, J, K, L & M]</p> <p>1.4 Major items of Equipment proposed for carrying out the Works. List all information requested below. [insert details in Form N]</p> <p>1.5 Qualifications and experience of key personnel for administration and execution of the Contract. Attach biographical data. [insert details in Form O & P]</p> <p>1.6 Proposed subcontracts and firms involved.</p> <p>1.7 Financial reports for the last five (5) years: balance sheets, profit and loss statements, auditors' reports, etc. List below and attach copies.</p> <p>1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of supporting documents.</p> <p>1.9 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Procuring and Disposing Entity.</p> <p>1.10 Information on any current litigation in which the Bidder is involved. [insert details in Form C]</p> |
|--|--|

- 1.11 Proposed Program (work method and schedule). Descriptions, drawings, and charts, as necessary, to comply with the requirements of the Bidding documents.

2. Joint Ventures

- 2.1 The information listed in 1.1 - 1.10 above shall be provided for each partner of the joint venture.
- 2.2 The information in 1.11 shall be provided for the joint venture.
- 2.3 Attach the power of attorney of the signatory(ies) of the Bid authorising signature of the Bid on behalf of the joint venture.
- 2.4 Attach the Agreement among all partners of the joint venture (and which is legally binding on all partners), which shows that
 - (a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
 - (b) one of the partners will be nominated as being in charge, authorised to incur liabilities, and receive instructions for and on behalf of any and all partners of the joint venture; and
 - (c) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

3. Additional Requirements

- 3.1 Bidders should provide any additional information required in Sections 2 or 3 of the Bidding Document or to fulfil the requirements of Clause 5.1 and Clause 31 of the Instructions to Bidders, if applicable.

3. Code of Conduct for Contractor's Personnel (ES) Form

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [*enter name of Contractor*]. We have signed a contract with [*enter name of Employer*] for [*enter description of the Works*]. These Works will be carried out at [*enter the Site and other locations where the Works will be carried out*]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

Note to the Bidder:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "**Contractor's Personnel**" and are subject to this Code of Conduct.

This Code of Conduct identifies the behaviour that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behaviour will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;

- c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
- 4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
- 5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
- 6. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
- 7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
- 8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
- 9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
- 10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
- 11. report violations of this Code of Conduct; and
- 12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism. .

RAISING CONCERNS

If any person observes behaviour that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behaviour prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

SN	Act of violation of CoC	Penalty
1.	Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Suspension • Immediate dismissal • Report to Police
2.	Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Suspension • Immediate dismissal • Report to Police
3.	Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;	Disciplinary action would include the following <ul style="list-style-type: none"> • Immediate dismissal • Report to Police
4.	Any form of sexual activity with individuals under the age of 18, excepting case of pre-existing marriage	Disciplinary action would include the following: <ul style="list-style-type: none"> • Immediate dismissal • Report to Police
5.	Discriminate or harass other employee or physical assault (local or foreigner) or any other person concerned with the project on grounds of sex, tribe, religion, nationality, ethnicity, marital status, disability or employment status.	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Suspension • IMMEDIATE DISMISSAL
6.	Entertaining unauthorized visitations including minors on the worksite.	Disciplinary action would include the following: <ul style="list-style-type: none"> • Suspension • IMMEDIATE DISMISSAL
7.	Verbal conduct that leads to sexual harassment	Disciplinary action would include the following according to the nature of act of violation: <ul style="list-style-type: none"> • Written warning • Suspension • IMMEDIATE DISMISSAL
8.	Retaliation against any person who raises a concern	Disciplinary action would include: <ul style="list-style-type: none"> • Suspension • IMMEDIATE DISMISSAL

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person(s) with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors

(1) Examples of sexual exploitation and abuse include, but are not limited to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

4. Additional Requirements

Bidders should provide any additional information required in Sections 2 or 3 of the Bidding Document or to fulfil the requirements of Sub-Clause 4.1 and Clause 30 of the Instructions to Bidders, if applicable.

4.5 SCHEDULE OF MALAWIAN LOCAL CONTRACTORS

With reference to Clause 4.4 of the General Conditions of Contract, the Bidder shall list below the subcontractors he intends to appoint for the various items of work on this contract.

It is an explicit requirement of the Contract that at least thirty percent (30%) of the total value of the works, excluding escalation, contingencies, provisional sums and VAT, be subcontracted to Malawian Local Contractors.

It is an explicit requirement of the contract that Bidders must submit Subcontracting agreement with the proposed subcontractors. The value of works proposed to be subcontracted shall be in line with the contractors' NCIC category.

The acceptance of this tender shall not be construed as approval of all or any of the listed subcontractors. In the event that any or all of the subcontractors are not approved subsequent to acceptance of the tender, this shall in no way invalidate this tender and the tendered unit rates for the various items of work shall remain final and binding even in the event of a subcontractor not being approved by the Engineer.

Activity	Name Of Subcontractor	Estimated Value Of Work (MWK)

AUTHORISED SIGNATORY OF THE BIDDER: _____

NAME OF AUTHORISED SIGNATORY: _____

NAME OF THE BIDDER: _____

Qualification Information Form B: Historical Contract Non-Performance

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Names: _____

Procurement Reference No.: _____

Non-Performing Contracts in accordance with the Technical Criteria			
<ul style="list-style-type: none">Contract non-performance did not occur during the stipulated period, in accordance with Factor 8 of Section 3.Contract non-performance during the stipulated period, in accordance with Factor 8 of Section 3.			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount
_____	_____	Contract Identification: _____ Name of Client: _____ Address of Client: _____ Matter in dispute: _____	_____

Qualification Form C: Pending Litigation

Pending Litigation, in accordance with Section 3			
<ul style="list-style-type: none"> No pending litigation in accordance with Factor 8 of Section 3 Pending litigation in accordance with Factor 8 of Section 3, as indicated below 			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount
_____	_____	Contract Identification: Name of Client: Address of Client: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Client: Address of Client: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Client: Address of Client: Matter in dispute:	_____

Qualification Form D: Environmental, Social, Health and Safety Performance Declaration

Environmental, Social, Health, and Safety Performance Declaration in accordance with Section 3, Qualification Criteria, and Requirements			
<input type="checkbox"/> No suspension or termination of contract: A Client has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental, Social, Health, or Safety (ESHS) performance specified in ITB Clause 38.			
<input type="checkbox"/> Declaration of suspension or termination of contract: The following contract(s) has/have been suspended or terminated and/or Performance Security called by a Client(s) for reasons related to Environmental, Social, Health, or Safety (ESHS) performance as specified in, ITB Clause 38. Details are described below:			
Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (value, currency, exchange rate and MWK equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Client: <i>[insert full name]</i> Address of Client: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Client: <i>[insert full name]</i> Address of Client: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
...	...	<i>[list all applicable contracts]</i>	...
Performance Security called by a Client(s) for reasons related to ESHS Performance			
Year	Contract Identification		Total Contract Amount (current value, currency, exchange rate and MWK equivalent)
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Client: <i>[insert full name]</i> Address of Client: <i>[insert street/city/country]</i> Reason(s) for calling of performance security: <i>[indicate main reason(s)]</i>		<i>[insert amount]</i>

Qualification Form E: Current Contract Commitments / Works in Progress

[The following table shall be filled in by the Bidder, each member of a Joint Venture / Consortium / Association]

Bidder's Name: *[insert full name]* Date: *[insert day, month, year]*

Joint Venture / Consortium / Association Member's Name: *[insert full name]*

Proc. Reference No: *[insert Reference Number]*

[Bidders and each partner to a JV/ Consortium / Association should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.]

Name of contract	Client, contact address/tel/fax	Value of outstanding work	Estimated completion date	Average monthly invoicing over last six months (MWK /month)
1.				
2.				
3.				
4.				
5.				
etc.				

Qualification Form F: Financial Situation: Historical Financial Performance

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Legal Name: _____

Procurement Reference No.: _____

To be completed by the Bidder and, if JV/ Consortium / Association, by each partner

Financial information in MWK equivalent	Historic information for previous _____ (___) years (MWK equivalent in 000s)						
	Year 1	Year 2	Year 3	Year ...	Year n	Avg.	Avg. Ratio
Information from Balance Sheet							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information from Income Statement							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- Must reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies
- Historic financial statements must be audited by a certified accountant
- Historic financial statements must be complete, including all notes to the financial statements
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

Qualification Form G: Average Annual Construction Turnover

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Annual turnover data (construction only)		
Year	Amount and Currency	MWK equivalent
*Average Annual Construction Turnover		

*Average annual turnover calculated as total certified payments received for work in progress or completed over the number of years specified in Section 3, Factor 8, divided by that same number of years.

Qualification Form H: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in Section 3: Evaluation Methodology and Criteria.

Source of financing	Amount (MWK equivalent)
1.	
2.	
3.	
4.	

Qualification Form I: General Experience

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Startin g Month / Year	Ending Month / Year	Years*	Contract Identification	Role of Bidder
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____
_____	_____		Contract name: Brief Description of the Works performed by the Bidder: Name of Client: Address:	_____

*List calendar year for years with contracts with at least nine (9) months activity per year starting with the earliest year

Qualification Form J: Specific Experience Form 1

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Similar Contract Number: _____ <i>[insert specific number]</i> of _____ <i>[insert total number of contracts required.]</i>	Information		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	<input type="checkbox"/> Prime Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount	_____		MWK _____
If partner in a JV or subcontractor, specify participation of total contract amount	_____ %	_____	MWK _____
Client's Name:	_____		
Address:	_____ _____ _____		
Telephone/fax number:	_____		
E-mail:	_____		

Qualification Form K: Specific Experience Form 2

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

Similar Contract No. ____<i>[insert specific number]</i> of ____<i>[insert total number of contracts]</i> required	Information
Description of the similarity in accordance with Sub-Factor 6.2.8a) of Section 3: Evaluation Methodology and Criteria.:	
Amount	_____
Physical size	_____
Complexity	_____
Methods/Technology	_____
Physical Production Rate	_____

Qualification Form L: Specific Experience in Key Activities 1

Bidder's Name: _____ Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

	Information		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount	_____	_____	_____
If partner in a JV / Consortium / Association, specify participation of total contract amount	_____ %	_____	_____
Client's Name:	_____		
Address:	_____ _____ _____		
Telephone/fax number:	_____		
E-mail:	_____		

Qualification Form M: Specific Experience in Key Activities 2

Bidder's Name: _____

Date: _____

JV/ Consortium / Association Partner Name: _____

Procurement Reference No.: _____

	Information
Description of the key activities in accordance with Sub-Factor 6.2.9 b) of Section III:	

We, the undersigned, declare that the information contained in and attached to these forms is true and accurate as of the date of Bid submission:

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

Name: *[insert complete name of authorized person signing the Qualification Form]*

Duly authorised to sign the Qualification Form for and on behalf of: *[insert complete name of Bidder or name of Joint Venture/ Consortium / Association]*

Dated on _____ day of _____, _____ *[insert day / month / year of signing]*

Qualification Form N: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section 3, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

Omit the following information for equipment owned by the Bidder.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

Qualification Form O: Key Personnel**Contractor's Representative and Key Personnel
Schedule**

Bidders should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to meet the specified requirements for each of the positions listed in Section III to perform the Contract. The data on their experience should be supplied using the Form P below for each candidate.

1.	Title of position:
	Name
2	Title of position:
	Name
3.	Title of position:
	Name
4	Title of position:
	Name:
5	Title of position:
	Name
6	Title of position:
	Name
7	Title of position:
	Name
8	Title of Position:
	Name

Qualification Form P: Key Personnel

Resume and Declaration

Contractor's Representative and Key Personnel

The Bidder shall provide all the information requested below.

Position		
Personnel information	Name	Date of birth
	Professional qualifications	
Present employment	Name of Employer	
	Address of Employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present Employer

Summarise professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company, Project, Position, and Relevant Technical and Management Experience*

Declaration

I, the undersigned [*insert either "Contractor's Representative" or "Key Personnel" as applicable*], certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Bid:

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>

I understand that any misrepresentation or omission in this Form may:

- (a) be taken into consideration during Bid evaluation;
- (b) result in my disqualification from participating in the Bid;
- (c) result in my dismissal from the contract.

Name of Contractor's Representative or Key Personnel: [*insert name*]

Signature:

Date: (day month year): _____

Qualification Form Q: Schedule of subcontractors

With reference to ITB Clause 4, the Bidder shall list below the subcontractors he intends to appoint for the various items of work on these contract alternatives may be mentioned.

Sections of the Works	Value of subcontract	Subcontractor (name and address)	Experience in similar work

Qualification Form R: Analysis of Main Unit Rates (1)

SCHEDULE V-1

ANALYSIS OF MAIN UNIT RATES

Item No. (See Bills)	Materials MWK	Labour MWK	Plant, Equipment Transport MWK	Fuel Lubricants MWK	& Overheads & Profit MWK	Total Rate MWK

Signed: _____

Name and Position: _____
(Tenderer or his Representative)

ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY DECLARATION

We, _____ (*Name of Bidder*) bearing the company registration number _____, hereby:

1. PLEDGE THAT:

- (a) We have read, understood, and will comply with:
 - (i) the Environment Management legal framework or policies in conservation and management of the environment.
 - (ii) all necessary and appropriate measures to protect and manage the environment
 - (iii) all necessary and appropriate measures to conserve natural resources and to promote sustainable utilization of natural resources
 - (iv) all steps and measures necessary for ensuring that social safeguard issues including but not limited to gender, human rights, disability, Child Protection, HIV and AIDS are mainstreamed throughout all construction stages to minimize the negative impacts on the environment, social, health and safety matters

2. AGREE THAT:

- (a) In the event that our Bid is successful, we shall, within 15 days from the receipt of the Acceptance Letter comply with the requirements to produce the following environmental, social, health and safety plans as provided in Section 10:- Site Organisation Plan, Mobilisation and Construction Schedule Plan, Code of Conduct for Contractors Personnel Plan, ESHS Management Strategies and Implementation Plan.
- (b) Contract negotiations shall only commence if our plans comply with the Malawi standards on the protection and management of the environmental, social, health and safety matters.
- (c) We will automatically be suspended from being eligible for Bidding in any contract with the Procuring and Disposing Entity and any other government entity for a period of twenty-four (24) months starting on the date as may be determined by the Authority if we are in breach of our obligation(s) under the Bid conditions.

Signed: [**insert signature of person whose name and capacity are shown**] In the capacity of [**insert legal capacity of person signing the Bid**]

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

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

Dated on _____ day of _____, _____ [**insert date of signing**]

Section 5. Eligible Countries

Procurement Reference Number:

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

46.1 A country shall not be eligible if:

- 46.1.1 as a matter of law of 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 works required; or
- 46.1.2 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 works from that country or any payments to persons or entities in that country.

Section 6. Corruption and Fraud

Section 6. Corruption and Fraud

1. The Malawi Government requires that Procuring and Disposing Entities, Bidders and Suppliers, participating in public procurement, observe the highest standard of ethics during the procurement and execution of such contracts.
 - (a) For purposes of this provision—

“coercive practices” mean practices intended at harming or threatening to harm, directly or indirectly, a person or a person’s asset, to influence that person’s participation in a procurement proceeding, or effect the execution of a procurement contract;

“collusive practices” means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring and Disposing Entity, designed to establish prices at artificial, noncompetitive levels;

“corrupt practice” has the meaning ascribed to the term by the Corrupt Practices Act (Cap7:04 of the Laws of Malawi);

“fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process, the execution of a contract or avoid an obligation; and

“obstructive practice” means deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation
 - (b) The Malawi Government 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;
 - (c) The Authority 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; and
 - (d) The Procuring and Disposing Entity will cause every Bidder to acknowledge and sign Anti-Corruption Declaration in this Section under Oath, a confirmation that the Bidder, its subcontractors, joint venture partners, or any other associate has not been convicted or is under investigation on corruption and fraud related cases. Failure to sign the Declaration shall lead to disqualification.
2. Bidders shall read and understand this provision; and will show acknowledgement of having read and understood the provision by signing compliance Form in this Section below:

ANTI-CORRUPTION DECLARATION FORM

We/I, _____ (*Name of Bidder*) bearing the company registration number _____, hereby:

1. PLEDGE THAT:

- 1.1 We have read and understood, and will comply with all applicable laws, regulations and policies relating to anti-corruption and fraud
- 1.2 We shall not, through any of our representatives, agents or any persons associated to us, commit any corruption offence or breach any of the applicable laws and/or provisions. We shall not encourage any corruption elements within our business practices, activities, operations, and transactions.
- 1.3 We have not been convicted nor are we aware that we are subject of any corrupt related investigation, inquiry, or enforcement proceedings by the relevant authorities and will report of such investigation as soon as we become aware as reasonably practicable and to the extent permitted by law.
- 1.4 We shall take all measures and implement appropriate measures to ensure compliance with the Anti-Corruption Legal Framework.
- 1.5 We shall report to any relevant Authority, a public officer attempting to solicit a bribe or advantage from us, or any other person connected to us to be awarded a contract.

2. AGREE THAT:

In the event that we are in a confirmed breach of this declaration, the Procuring and Disposing Entity may disqualify the Bid, revoke or terminate the contract if awarded to us without any liability whatsoever on its part, indemnify the Procuring and Disposing Entity for any loss.

Signed: **[insert signature of person whose name and capacity are shown] In the capacity of [insert legal capacity of person signing the Bid]**

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

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

Dated on _____ day of _____, _____ **[insert date of signing]**

Section 7. Schedule of Requirements

A. Scope of Works

1.0 Description of the Works

a) General

The description is only an indication of the work to be executed and may change due to unforeseen conditions on-site. All construction activities are not necessarily listed below and only the main and major activities are dealt with. The scope of works may change due to changes in site conditions, or as directed by the Employer or the Engineer.

The project location is in Mzimba District on Euthini to Chiseng'eze (M009) Road. It is about 5km from Euthini Trading Centre towards Mzimba Boma.

The scope of the bid is for the construction of a total 20m (10m,10m) span reinforced concrete bridge starting from foundations.

b) The Bridge Structures

C.1. Foundations

The foundations shall entail excavations on the river bed for two abutments and one pier where a set of 900mm diameter culverts shall be inserted into the ground for a depth of two metres and shall act as permanent formwork /encasement of foundation concrete. The top shall receive a pile head like rectangular slab flash with river bed from which the pile and abutment structures shall stand.

C.2. Bridge Decks

Two number 10metre bridge decks based on the 30 tonne Ministry of Works design shall provide a crossing spanning the the pier and abutments.

c) Appurtenant Works

D.1. General

The bridge structure will include road approaches constructed with selected fill and gravel raised to a total of not less than 400mm for a total of around 150-200m on either side.

D.2. Road Signage

All temporally road signs used during construction shall conform to requirements of SABS 1519 and shall be in Retro-reflective material.

Road sign details will be provided by the Engineer during construction.

D.3. Road Markings

This being an earth road, road marking is not applicable at the moment.

1.1 Drawings

A book of drawings shall be provided comprising during construction.

1.2 Site Facilities

(a) Site facilities available

The Contractor will be responsible for the provision of a suitable site for his construction camp and to provide accommodation for his personnel.

The Contractor shall make his own arrangements for the supply of potable water and water for construction purposes, and for electrical power and all other services as well as all safety and security measures necessary for the duration of the contract. In his Bid he must make provision for all negotiations and procurement of these services, which will be deemed to have been included in his tendered rates.

(b) Site facilities required

The following facilities shall be required on the campsite:

- i. Contractor's offices
- ii.
- iii. Storage facility for building materials and equipment
- iv.
- v. Parking areas
- vi. Portable water
- vii. Sanitation and Refusal disposal facilities
- viii. Generators to compliment power supply (optional)

(c) Security and Social Issues

The Contractor will be responsible for the security of his personnel and construction plant on and around the Site of the Works and for the security of his camp, and no claims in this regard will be considered by the Employer. Special attention shall be given to vulnerable groups such as women, girls and disabled workers. No underage persons shall be employed.

1.3 Climate

The project site is in Lilongwe City and the climatic conditions for this project area is as shown in the table below;

Climatic Conditions

Item	Mzimba
------	--------

Mean Rainfall	900mm
Mean Temperature	23°C

1.4 Features Requiring Special Attention

(d) Roads and Site to be Kept Clean

The Contractor shall make sure that road approaches to the bridge, bridge and campsite are always kept clean. The Contractor shall provide dustbins designated for different waste types such as for biodegradable and non-biodegradable, and harmful and non-harmful. Oils from workshop and other waste from road construction shall only be disposed of in approved areas.

(e) Working Hours

The Contractor shall come up with working schedule for all employees. Working hours for all employees shall be properly spelt out. However, the working hours should be in accordance with the Malawi Government labour laws.

1.5 Construction Period

The estimated time for the construction of Lubeya bridge is four (4) calendar months.

1.6 Extension of Time Resulting from Abnormal Rainfall

It must be noted that the extension of time resulting from abnormal rainfall shall not be regarded as an event for which compensation can be claimed. This means that no payments whatsoever will be made, including any payments under time related obligations, regardless of the period of time by which the Time for Completion may be extended due to abnormal rainfall

B. Bills of Quantities or Activity Schedule

(a) Bills of Quantities

Provided separately

(b) Activity Schedule

Provided seperately

C. Drawings

(Provided separately)

D. Technical Specifications

[In drafting of the Specifications, care must be taken when drafting the Procuring and Disposing Entity's Requirements to ensure that the requirements are not restrictive. Recognized international standards should be used as much as possible for the description of the Related Goods, materials and workmanship. Where other particular standards are specified, it should be stated that goods, materials and workmanship meeting other authoritative standards and which promise to ensure equal or higher quality than the standards specified, will also be acceptable. Where a brand name of a product is specified it should always be qualified with the terms "or equivalent".]

E. TECHNICAL SPECIFICATIONS

The Technical Specifications to be used for this Contract contain two Parts as follows:

PART A: STANDARD SPECIFICATIONS

The Standard Specifications for this contract shall be the Southern African Transport Co-ordination Committee (SATCC) Draft Standard Specifications for Road and Bridge Works, September 1998, reprinted July 2001.

This Document, which forms Part of the Tender and Contract documentation, is printed by the SATCC in Maputo in Mozambique and all Tenderers should acquire their own copy of this standard document at their own cost.

PART B: PARTICULAR SPECIFICATIONS

THE PARTICULAR SPECIFICATIONS FORM AN INTEGRAL PART OF THE TENDER AND CONTRACT DOCUMENTATION AND SUPPLEMENT THE STANDARD SPECIFICATIONS.

In the event of any discrepancy with a part or parts of the Standard Specifications, the Bill of Quantities or the Drawings, the Particular Specifications shall take precedence. The Particular Specifications are contained in the pages that follow.

All references to Project Specifications in the Standard Specifications shall mean Particular Specifications for this contract. The terms "Project Specifications" and "Particular Specifications" shall be interpreted to have the exact same meaning.

All works shall be measured as described in the Bill of Quantities.

The Particular Specifications, shall supplement and modify, delete and/or add to the Standard Specifications, as stated. Where any Clause, paragraph or sub-paragraph in the Standard Specifications is supplemented by one of the following paragraphs from the Particular Specifications, the provisions of such Clause, paragraph or sub-paragraph shall remain in effect and the supplemental provisions shall be considered as added thereto, deleted, or superseded by any of the following paragraphs in the Particular Specification, the provisions of such Clause, paragraph, or sub-paragraph in the Standard Specification, not so amended, deleted or superseded shall remain in effect.

Clauses and pay items modified by the Particular Specifications are numbered "PS" followed by a number corresponding to the number of the relevant clause or pay item in the Standard Specifications. New clauses and pay items not covered in the Standard Specifications are also designated "PS" followed by a number. These numbers follow on from the last clause or payment item number used in the relevant section of the Standard Specifications.

PART B: PARTICULAR SPECIFICATIONS

SERIES 1000:GENERAL

Section 1100:Definitions and Terms

Change Clause 1126 as follows:

PS 1126 Road Prism

The areas indicated in Figures 1 and 2 in the SATCC Draft Standard Specifications for Road and Bridge Works issued by the SATCC in September 1998 (reprinted July 2001).

Section 7

Work Requirements

Contents

- 7 (A) Scope of Works (See Volume I)
- 7 (B) Drawings (See Volume I)
- 7 (C) Technical Specifications
- 7 (D) Supplementary Information

SECTION 7C: TECHNICAL SPECIFICATIONS

PART B: PARTICULAR SPECIFICATIONS

SERIES 1000: GENERAL

Section 1100: Definitions and Terms

✓ ***Change Clause 1126 as follows:***

PS 1126 Road Prism

The areas indicated in Figures 1 and 2 in the SATCC Draft Standard Specifications for Road and Bridge Works issued by the SATCC in September 1998 (reprinted July 2001).

✓ ***Add the following definitions:***

PS 1142 Routine Term Maintenance Contract

This is a contract that operates on the basis of a Contractor being appointed for a fixed period of time (typically 1 year with possible extension) to undertake a variety of maintenance tasks, as-and-when the need arises and the requirement to do any work is instructed by means of a Works Order issued by the Employer or his Representative.

PS 1143 – Additional Routine Term Maintenance (RTM) Definitions

The following table provides additional definitions for the routine term maintenance works.

Term	Meaning
AASHTO	American Association of State Highway and Transportation Officials.
ASTM	American Society for Testing Materials.
Binder	Viscous adhesive (normally bitumen based) used to bind aggregates together and provide waterproofing.
Bitumen	Petroleum based binder formed as residue following the distillation of crude oil. Comes in various grades depending on viscosity and volatility.
Blading	The activity of cutting the road surface using a motor grader.
Bleeding	Excess free binder on the surface of the pavement.
Block Cracking	Interconnected cracks in a bituminous road surface forming a series of large polygons usually with sharp corners or angles.
BS	British Standard.
California Bearing Ratio (CBR)	A standard test (ASTM D1883) which assigns a relative support / strength value based on resistance force to a penetrating plunger. Percentages quoted are relative to a standard compacted crushed stone. Samples are pre-soaked for at least 4 days, unless otherwise stated.

Term	Meaning
Camber	The uniformly shaped slope of a road lane necessary to shed water off the road.
Camber board	'Homemade' apparatus for checking cross-fall of road or shoulder camber. Has a level upper surface used with a spirit level.
Cold-mix	A bitumen / aggregate asphalt, made with cutback bitumen to allow workability at ambient ('cold') temperatures. Used mainly for patch / pothole repair.
Compaction Fraction	A standard test for pipe bedding which compares un-compacted and compacted volumes of material using a specified procedure.
Cross-Fall	The gradient of pavement camber measured transversely across the road. Usually falls to either side of the centre line but may slope continuously across the road on bends ('super-elevation').
Crown	The highest point of the cross-section of the road, usually the centre line.
Cure	A term applied to the hardening of a bitumen cutback or emulsion resulting from the evaporation of volatile 'cutter' or water.
Cut-back (bitumen)	A blend of bitumen and volatile 'cutter' (normally a mixture of kerosene & diesel). Material is graded in terms of viscosity and curing rate (SC, MC & RC: 'slow', 'medium' and 'rapid' curing). Viscosity increases with size of number (e.g. MC 3000).
Emulsion (bitumen)	A mixture of water and bitumen (held in fine suspension). Used mainly for surface dressing (treatment), patching material and as a tack coat. Can be used cold.
Kettle	Small mobile heater unit for raising the temperature of bitumen binders. Often fitted with hand lance and discharge pump / hose.
Length - Person	A person assigned to perform a prioritised list of labour based routine maintenance operations to defined sections of a road.
Nominal aggregate size	Normally the 2 nd largest sieve size in a quoted grading. Usually 100% must pass the largest, with a retained percentage required on the 2 nd largest.
Overlay	A uniform thickness layer of asphalt applied over an existing road, largely for strengthening the pavement.

Term	Meaning
Patching	The localised application of bituminous surfacing to an existing bituminous surface, to fill depressions or seal a defect.
Periodic Maintenance	Maintenance works that are occasionally required at intervals of several years. Normally relatively costly, large scale works requiring specialist equipment and skilled resources.
Plasticity Index	Abbreviated 'PI'. The difference between Liquid and Plastic Limits of the 'fines' content of an aggregate material – serves as an indicator of the 'clay' content of the fines.
Prime coat	A penetrating, liquid application of heated bitumen (often a cutback) applied to an unbound aggregate pavement layer (usually base course) to provide a bond between unbound aggregate and bituminous seal.
Rehabilitation	A major intervention to an existing road aimed at significantly extending its design life.
SABS	South African Bureau of Standards.
SATCC	Southern African Transport and Communications Commission.
Spoil	Material originating from the maintenance / construction operations which is not re-utilised ('waste').
Weep hole	A hole in a wall / structure which allows the passage of water for the purpose of preventing the build-up of water pressure.
Windrow	A long, narrow mound or bund of material formed by a motor-grader.
Works Order	An instruction issued by the Employer or his Representative which directs the Contractor to carry out Works or perform some function or obligation under the Contract.

SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

✓ ***Add to following to Clause 1201:***

PS 1201 SCOPE

The Section also covers matters which in particular relate to the Routine Term Maintenance (RTM) contract (**From PS 1230 to PS 1239**). The RTM contract operates on the basis of a Contractor being appointed for a fixed period of time (typically 1 year with possible extension) to undertake a variety of maintenance tasks, as-and-when the need arises and the requirement to do any work is instructed by means of a Works Order issued by the Employer or his Representative.

The types of work covered through this Routine Term Maintenance (RTM) approach are limited to activities that are required regularly to keep the Malawian road network in good and fair conditions and for which the scope of the work is reasonably predictable. Contractor's prices are required to be applicable regardless of where, when and in what quantity the work arises on the road network. This makes the approach quite different from a 'works style' contract where the rates take careful account of site-specific information and considerations. For these reasons RTM is particularly suitable for routine road maintenance works. Conversely, most 'periodic maintenance' activities (e.g. regravelling or resealing) are planned in advance. Here, the presentation to bidders of detailed site information ensures that competitive bids are encouraged. Making this distinction also avoids situations where relatively short sections of periodic maintenance can rapidly exhaust funds set aside for continuous routine tasks. For this reason separate budget heads for routine term maintenance (RTM) and periodic activity contracts are normal.

Dayworks are included in RTM contracts to facilitate 'emergency' works and also those of unusual requirements. Finally, an item for 'Length-persons' has been incorporated and will be particularly useful for instances where a road section already brought to a good standard requires preserving as such by continuous, minor attention.

PS1204: PROGRAMME OF WORK

✓ ***Replace the first paragraph with the following:***

(a) APPROVED PROGRAMME

The contractor shall submit his programme of work, within the time stated in the Particular Conditions of Contract, to the Engineer for approval. The Contractor shall ensure that he has at his disposal adequate staff with the necessary expertise to develop and maintain the network programme for the duration of the contract and to provide the information required by the Engineer as specified hereafter.

The programme shall be in a bar chart (Gantt chart) or any other time-activity format acceptable to the Engineer and shall clearly show:

- (1) The proposed rate of progress in order to complete the works within the required period as tendered, showing the various activities, their duration and proposed resources (major plant and labour) for each element of the works. Sufficient details shall be provided to enable the Engineer to be able to assess construction progress. All activities, including establishment on site, trimming and finishing and the completion of all minor ancillary works are to be included in the programme.
- (2) The sequence of activities and any dependencies (time or resource related) between them; the critical path activities; the amount of slack time for non-critical activities;
- (3) Key dates in respect of work to be carried out, or information, etc., to be provided, by others.
- (4) The anticipated value of work to be done during each month and any
- (5) Other information specifically required by the Engineer.

When drawing up his programme, the Contractor shall, take into consideration:

- (1) Testing and approval process of materials and works
- (2) Expected weather conditions and their effects.
- (3) Known physical conditions or artificial obstructions.
- (4) The accommodation and safeguarding of public traffic.
- (5) Dealing with, altering and installing services.
- (6) Expropriation and all other actions required in terms of this contract.

The following details shall be submitted together with the programme.

- (1) the number of working hours per day, working days per week, assumed holiday or shut-down periods on which the programme is based.
- (2) The overall labour and major plant resources on which the programme is based.
- (3) The detailed traffic accommodation proposals on which the programme is based (road or lane closures, lengths of sections to be worked, timing etc).
- (4) The rate of production for major works components such as layer works, subbase, base, surfacing, etc (units per day / hour) on which the programmed time for carrying out the work is based.

The Contractor shall base his initial programme of work on the scope of the work as described in the Particular Specifications. This programme shall be reviewed on a regular basis by the Contractor in accordance with changing circumstances, delays and amendments to the work ordered by the Engineer as a result of further examinations made by him.

Minor revisions to the approved programme may be introduced from time to time by mutual agreement between the Contractor and the Engineer. Should the Engineer believe that a major revision of the programme is required, the Contractor will be notified in writing and a revised programme shall be submitted within two weeks of receipt of such notification.

It should be noted that it is in the Contractor's interest to provide a comprehensive programme giving as much information as possible about the times allowed for the various activities as well as resource or other limitations affecting the programme, since the approved programme may be used to evaluate any claims in terms of the General Conditions of Contract for extensions of time.

(b) REPORTING

The Contractor shall submit to the Engineer, at least three working days before each monthly site meeting copies of the following:

- (i). The construction programme with progress charts and programme graphs updated to reflect the actual progress to date.
- (ii). A summary of progress on site over the month preceding the site meeting. The report shall be in the form of a detailed narrative to the construction programme.
- (iii). Details of activities running late, indicating what steps have been or will be taken to ensure that the work is completed within the specified time.
- (iv). A report on all labour, plant and materials on site, according to sub-clauses PCC 4.21 and PCC 6.10 of the Particular Conditions.

PS1206 THE SETTING-OUT OF WORK AND PROTECTION OF BEACONS

✓ ***Add the following at the beginning of this clause:***

"Upon issuance of the order to commence, the Engineer shall issue to the Contractor a set of setting out co-ordinates and the Contractor shall set out the works accurately and shall be responsible for any error(s) which may occur in such setting out and shall amend and rectify such error(s) at his own expense.

In addition to setting out data, the Engineer shall issue to the Contractor co-ordinates of Benchmarks and control points for survey control. The Contractor shall, prior to using the benchmarks and control points, check their accuracy and confirm in writing to the Engineer that the information is sufficient for setting out the works accurately. Should discrepancies be found in the information issued by the Engineer, the Contractor shall afford the Engineer the opportunity to investigate the discrepancies and correct them within a period of seven calendar days. The Contractor shall programme his work in such a way that this requirement will not impact negatively on the rate of progress of the works, and no claim for extension of time will be entered pursuant to this requirement.

The Contractor may if he deems it necessary, establish additional control points. Any additional control points shall consist of steel pegs set in concrete at positions not likely to be affected by the works. The coordinates of the established points shall be issued to the Engineer in the form 'Name,Y,X,Z'"

✓ ***Replace the second sentence in the second paragraph with:***

"In case that the reference beacons along the contract sections have been either destroyed, displaced or damaged before the handing over of the site to the contractor, then the Engineer will arrange to have new reference benchmarks reinstated by the Contractor at 500 m intervals and the cost of the re establishment work will be paid under Section 1800 (Day Works) of the Particular Specifications".

PS1207: NOTICES, SIGNS AND ADVERTISEMENTS

✓ ***Add the following to the second paragraph:***

See Section 6D in Volume II of this document for details of the Notice Boards. These boards shall remain in position until the end of the Defects Liability Period, and shall then be removed without delay.

PS 1208: MEASUREMENTS

✓ ***Add the following clause to 1208 (c):***

Cross-sectional levels shall be taken at not greater than 20-metre intervals jointly from the Surveyor of the Engineer and of the Contractor and agreed between the Contractor and the Engineer before any clearing, grubbing, stripping of topsoil or earthworks are undertaken and at any stage thereafter that the Engineer may require.

Cross sections shall be taken at the same interval as the setting out. The cross sections shall cover the entire road reserve and shall contain a minimum of seven points consisting of centre point and three equally spaced points on either side of the centre point. The points shall be in line and perpendicular to the centre line. The results of the survey shall be certified by the Engineer as soon as possible.

PS1209 PAYMENT

(b) Rates to be inclusive

✓ ***Replace "period of maintenance" in the last line of the first paragraph with "Defects Liability Period"***

(c) The meanings of certain phrases in payment clauses

(i) Procuring and furnishing (materials)

✓ ***Insert "duties" in the sixth line of sub-clause after "all tax"***

PS 1210 CERTIFICATE OF COMPLETION OF THE WORKS

✓ ***Add the following to this clause:***

Opening of a section of road to public traffic **before** the requirements of Clause 1210 have been met, if such opening should be allowed by the Engineer, shall not entitle the Contractor to the issue of a Certificate of Completion for the road section in question.

PS 1214: Contractor's Activities in Respect of Property Outside the Road Reserve and of Services Moved, Damaged or Altered

✓ ***Add the following clause 1214 (f):***

Any of the Contractor's activities outside the Site or outside the road reserve on property not belonging to the Employer shall be exclusively at the Contractor's own risk, cost and responsibility."

PS1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

✓ **Method (ii) (Critical – path method) will be used for determining the extension of time due to inclement weather.**

- ✓ Add the following table B1215/1 at the end of section on Method (ii) (Critical Path)
- ✓ Abnormal rain as shown in table B1215/1 shall be proven by rainfall records for previous five years (prior to contract start date) from Metrological Department. For the purposes of calculating an extension of time due to climatic conditions the number of days in excess of the number of working days anticipated to be lost due to climatic conditions as shown in Table B1215/1 shall be taken into account:

B 1215/1: Anticipation days ("n" working days) lost due to climatic conditions:

Month	Rain Days		
	Northern Region	Central Region	Southern Region
January	19	15	18
February	19	12	16
March	16	10	11
April	9	7	6
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	2	3	0
December	5	10	9
Total	70	57	60

The Engineer will certify a day lost due to climatic conditions only if:

- (a) no work on the critical path according to the latest approved programme for completion of the works could be carried out during that specific working day or if
- (b) only 30% or less of the work force and plant planned for that specific day, could work.

The extension of time as a result of climatic conditions will be calculated monthly as being equal to the number of days certified by the Engineer as lost due to climatic conditions, less the number of days in Table B1215/1. The total extension of time for the contract will be the sum of the monthly extensions. If the total extension of time for the Contract is negative it will be disregarded when determining the completion date(s)."

Add the following new clauses:

PS 1230: Road Network Inspections

Inspections are required to constantly watch and monitor the condition of the road network so that necessary maintenance works can be identified in a timely manner. The Contractor is required to inspect all road asset features on the Network and to report the occurrence of problems and other areas of deterioration to the Employer's Representative in an agreed format, at monthly intervals on an agreed monthly date. The Employer's Representative will also be monitoring the Network, but he may also utilise reports from the Contractor as one key trigger for detailed inspections.

Emergencies shall be reported immediately they become known. Inspection requirements are detailed in the table below:

All costs incurred by the Contractor in performing these obligations should be covered by a particular pay item in the bills of quantities.

Table 1: Inspection Requirements

Road Class	Asset Item	Frequency of Inspection	Defects (Including location details)
Paved 'M' Roads	Pavement	Weekly	Occurrence and size of any pothole. Extent (length and width) of any edge breaks. Extent of any surface cracking.
	Drainage Ditches	Weekly	Height and extent of vegetation growth. Other blockages.
	Culverts / Structure	Monthly and Start and Finish of wet season	Nature and extent of any siltation (% of bore obstructed) Description of any structural defect.
All Other Paved Roads	Pavement	Fortnightly	Occurrence and size of any pothole. Extent (length and width) of any edge breaks. Extent of any surface cracking.
	Drainage Ditches	Fortnightly	Height and extent of vegetation growth. Other blockages.
	Culverts / Structure	Monthly and Start and Finish of wet season	Nature and extent of any siltation (% of bore obstructed) Description of any structural defect.

Road Class	Asset Item	Frequency of Inspection	Defects (Including location details)
All Unpaved 'M', 'S', 'T' Roads	Pavement	Fortnightly	Corrugations or ruts in the surface. Soft or eroded sections. Inadequate thickness of gravel. Loss of road camber.
	Drainage Ditches	Fortnightly	Height and extent of vegetation growth. Other blockages.
	Culverts / Structure	Monthly and Start and Finish of wet season	Nature and extent of any siltation (% of bore obstructed) Description of any structural defect.
All District Roads	Pavement	Monthly	Any road blockage or physical feature causing obstruction. Soft or eroded sections.
	Drainage Ditches	Monthly	Height and extent of vegetation growth. Other blockages.
	Culverts / Structure	Start and Finish of wet season	Nature and extent of any siltation (% of bore obstructed) Description of any structural defect.

PS 1231 - Emergency Works

In the case of emergency situations; the contractor who is present on a particular part of the road network on the basis of the routine term maintenance contract will be instructed to carry out the necessary emergency works. The speed and efficiency with which problems can be dealt with is an important feature of Routine Term Maintenance (RTM) contracts. Because of the unpredictable and urgent nature of some emergency works they are normally carried out on the basis of 'Dayworks'.

PS 1232 - Traffic Control

In the case of RTM contracts; traffic control shall be carried out in line with Section 1500 of these technical specifications.

PS 1233 Safety

The Contractor shall pay due regard to the safety of his workers and the travelling public. Any obstructions unavoidably left within the highway shall be clearly marked and have advance warning markers and signs in accordance with the specification.

All equipment and vehicles shall be in a good, safe condition. All intended guards and safety features originally provided by the manufacturer shall be in place and operational. Vehicles operating in the highway shall be roadworthy with working lights and braking system.

The Contractor shall pay particular attention to the safety of operators and all persons in the vicinity of heated bitumen works, and fuel transfer / storage operations. Fire extinguishers must be available and a prohibition of smoking must be actively enforced. The temperature of heated materials shall be measured and controlled to prevent overheating.

The Contractor shall have first aid facilities in place to attend to personal injuries that may result from accidents occurring within the work Site.

PS 1234 - Protection of the Environment

The Contractor shall take all reasonable precautions to avoid or limit environmental impact. In addition to normal good construction and maintenance practice; it is expected from the Contractor to strictly follow the requirements of the Environmental Guidelines and/or project

specific Environmental Management Plans produced by the Roads Authority. Any non-compliance with these requirements which could have been avoided in the opinion of the Engineer may be considered sufficient grounds for withholding payment of part or all of the amounts to be paid for the pay item PS13.05

PS 1235 - Length-Person Activities

The activities comprise providing, supervising and managing teams of 'length-persons' to perform a prioritised list of labour-based routine maintenance operations to sections of road, its shoulders, verges and drainage features. The Contractor is responsible for keeping the length-persons correctly equipped at all times. The activity assigns a defined road length to each length-person who conducts a number of routine maintenance activities on that section.

Some contracts require that a high level of precedence be attached to the performance of routine maintenance tasks by Length-persons managed by the main Contractor. In this regard it should be anticipated that the assignment of Length-persons will be required wherever practicable.

In all cases where length-persons have been assigned pursuant to a Works Order; the performance of associated routine maintenance activities shall always be measured as included under pay item

Length-persons will normally be assigned on the basis of one individual worker per 2 kilometre of road. This spacing may be adjusted and fixed by the Employer, following discussions with the Contractor, where either party considers the workload to be inappropriate based on field observations.

The use of length-persons will yield best results when applied to roads that are already in a good condition and / or have recently received a programme of periodic or routine maintenance to bring them into a maintainable condition.

The primary objective of the length-person is to carry out operations to preserve a road in a good condition. Generally the daily time inputs of length-persons will be as necessary to achieve the specified maintenance outputs ('performance standards') and will be adjusted accordingly by the Contractor.

However, where the road is initially in a poor condition, the Employer shall agree with the Contractor in advance of works starting, a period for enhancing the condition of the road when the activities and assigned work length intervals may be temporarily adjusted. In these cases performance targets will be set on the basis that each length person will provide work equivalent to an average of 40 hours effective labour per week.

Performance is controlled through the application of liquidated damages as specified in the Contract. This is on the basis of fixed deductions per kilometre for cases where in the opinion of the Employer's Representative the works are not adequately performed, and / or the length-person is not properly equipped.

Length-persons are categorised separately depending on whether they are assigned to rural or designated urban areas.

PS 1236 Quarries, Borrow Areas and Dumps

The Contractor is responsible for identifying all quarry and borrow areas that will yield materials in sufficient quantity and quality to meet all the requirements of the Specification. The Employer may provide reasonable assistance in securing consents and

licenses, however the Contractor shall be responsible for any compensation, royalty and any other costs associated with acquiring rights and operating the site.

The Contractor is similarly responsible for identifying and acquiring rights to use all dump sites and for their subsequent restoration.

The exploitation of all the identified borrow areas, quarries, and dumps (tips) must be approved by the Employer. Section 3100 provides general requirements on the operation and restoration of such areas.

PS 1237 Distinction of Earth and Gravel Roads

The relevant maintenance works for earth and gravel roads are described in different sections of the Technical Specifications. Section 3300 is applicable for maintenance works on earth roads which consist of unimproved earth soil. Section 3400 is applicable for maintenance works on gravel roads which have defined engineering properties and require more effort to cut, trim and compact as well as in sourcing, selecting, excavating and transporting the gravel.

PS 1238 - Target Serviceability Standards

The following schedule of intervention levels should be referred to by the Contractor when predicting the likely frequency, pattern and distribution of required maintenance works over the assigned Network. It is not applicable for works undertaken by Length-Person. It is for guidance purposes only. The Employer intends to use a similar schedule to guide the generation of Works Orders. The actual coverage of work will however be based on allocated project funds following the system of prioritisation described in PS 1239.

As an example, in the case of a single pothole appearing on a rural stretch of Main paved road, the Contractor can expect to be instructed to carry out a repair as soon as it reaches 250mm diameter in size. Upon receiving the instruction through a Works Order he would have to complete the repair within the time specified. Late completion would require the application of liquidated damages to the extent stated in the Contract.

ELEMENT	DEFECT	ROAD GROUP	EXTENT (MAX)	INTERVENTION
BITUMEN PAVED ROADS				
PAVEMENT	Potholes	'M' (Rural)	No single pothole >250mm dia.	Initiate repair
		'M' (Urban)	Three (3) potholes >250mm dia. per any 250m section	Initiate repair
			No single pothole >400mm dia.	Initiate repair
		All other (Rural)	No single pothole >400mm dia.	Initiate repair
		All other (Urban)	Five (5) potholes >250mm dia. per any 250m section	Initiate repair. Defer severe cases to 'Periodic Programme'.
			No single pothole >750mm dia.	Initiate repair
	Edge Breaks	'M' Roads	Loss of >200mm width over a length >10m.	Initiate repair. Investigate cause – also reinstate shoulder if necessary.
		All Others	Loss of >300mm width over a length >25m.	- ditto -

ELEMENT	DEFECT	ROAD GROUP	EXTENT (MAX)	INTERVENTION
PAVEMENT	Cracks >3mm width	'M' Roads	Any	Seal cracks
		All Others	Areas where >5% is affected.	Seal cracks
	Cracks <3mm width	'M' Roads	Areas where 10-20% is affected.	Apply slurry seal patch
		All Others	Areas where >20% is affected	Apply slurry seal patch
BRIDGES	Superficial deterioration	All	Based on visual assessment	Paint / repair
	Silted / blocked	All	Any significant build up	Clear
	Structural damage	All	Minor	Repair
		All	Major	Defer to Periodic Programme
PIPE CULVERTS	Silted	All	>25% of bore capacity lost	Clear following inspection before and after wet season
	Erosion	All	Affects stability of the structure / road	Repair following inspection following wet season
DRAINS	Silted / overtopping	All	Any observed overtopping during rains, or >25% loss of depth.	Repair following inspection before and after wet season
	Erosion	All	Any rapid worsening of condition.	Repair following inspection before and after wet season
SHOULDERS	Edge Step	All 'M' roads	>50mm step on a section >10m	Reconstruct shoulder
		All Others	>75mm step on a section >25m	Reconstruct shoulder
	Erosion	All	Any deteriorating condition threatening stability	Repair
SHOULDERS	High Vegetation	All	Interferes with sight lines or pedestrian access	Cut and clear
ROAD FURNITURE	Damaged signs	All	Function impaired	Replace
	Omitted signs	All	Urgent potential danger	Install new sign
	Faded road markings	All	>25% of length ceases to be distinguishable	Repaint
SAFETY	Obstructions	All	Any avoidable temporary danger	Urgent attention (usually 'dayworks')
	Slips and other hazards	All	Any assessed potential to restrict access	Clear and / or carry out stabilisation works

ELEMENT	DEFECT	ROAD GROUP	EXTENT (MAX)	INTERVENTION
UNPAVED ROADS				
Note: Due to the wide range of road conditions and traffic demand on the unpaved network, the majority of intervention levels should be determined on a case-by-case basis with the objective of maintaining reliable, year-round access.				
GRAVEL SURFACE	Corrugations and / or eroded surface	All (>250 vpd)	Traffic speed significantly impaired	Grade typically 4-5 times per year
		All (50 - 250 vpd)	Uncomfortable to travel	Grade typically 2-4 times per year
		All (<50 vpd)	Ensure safe reliable access	Grade typically 1-2 times per year
	Inadequate gravel thickness	All	<50mm thick on sections <250m long	Spot repair or localised re-gravelling
			<50mm thick on sections >250m long	Defer to 'Period Programme' (Re-gravelling)
EARTH	Shape	All	Ensure year round reliable access	Carry out 'spot improvements'
DRAINAGE FEATURES	Standing Water	All	Standing water on road surface	Spot improvement to improve profile / camber
DRAINAGE FEATURES	Standing Water	All	Any blockage to drains / culverts	Rectify

PS 1239 - System of Works Prioritisation

The following system for prioritising maintenance works has been developed in recognition that the available funding is often insufficient to perform all desired work.

The method does not apply to the assignment of Length-Persons, where the decision to put road sections under this form of maintenance is likely to be based on considerations that include the existing condition of the road and other social factors. An amount for Length-Person expenditure will normally be fixed for the Network, with the remaining budget apportioned using the prioritisation procedure.

The method relates the importance of the maintenance activity to the importance of the road. Roads are ranked according to whether they are bitumen paved and by classification category. This places strategic paved roads within urban centres at the top in order of importance with unclassified roads at the opposite extreme.

Maintenance work activities have been ranked in the following order of importance:

Emergency: Urgent repairs to blocked or impassable roads including bridge redecking etc.
Removal of debris and stabilisation of side slopes that threaten to close the road or endanger life etc.

Road Surface Repair (Bitumen): Pothole repair, edge break repair, crack sealing etc.

Drainage (Routine): Ditch and culvert clearing, shoulder trimming, repairs to erosion damage, etc.

Drainage (Recurrent): Structural work (concrete, masonry, gabions etc.), new pipe culverts, subsoil drains etc.

Road Surface Repair (Unpaved): Spot repairs, grading, reshaping, rehabilitating etc.

Other Routine Work: Grass cutting, road signs and markings, etc.

The matrix overleaf indicates how the classification of maintenance activities is related to the classification of roads. Maintenance activities are numbered from 1 (highest priority) to 42 (lowest priority). The matrix is applied to the list of roads within the allocated Network to produce a ranked list of works. Whilst this will produce a rational and consistent order of priority it should not be considered inflexible and it is recognised that there may be special and localised reasons for making adjustments.

Proceeding down the list of prioritised works, the amount, extent and necessity for each category will be determined with the aid of Target Serviceability Standards set out in PS 1238. Works in the order of the prioritised list are then performed each month to the limit of the monthly budget allocation.

CATEGORY OF MAINTENANCE ACTIVITY	PRIORITY							
	ROAD GROUP							
TERM	Urban Paved ' M'	Rural Paved ' M'	Other Rural Paved	Other Urban Paved	Other Secondary	Other Tertiary	District	Unclassified
Emergency	1	2	3	4	5	6	10	11
Road Surface Repair (Bitumen)	7	8	9	12	13	14		
Drainage (Routine)	15	18	21	22	23	24	25	39
Drainage (Recurrent)	16	19	26	27	28	29	30	40
Road Surface Repair (Unpaved)					31	32	33	41
Other Routine Work	17	20	34	35	36	37	38	42

Adapted from Overseas Road Note 1 and 20

Figure PS 1239 - Matrix of Maintenance Priorities**PS 1240: LAND AVAILABLE**

The land available to the Contractor free of charge shall be as follows:

- (i) The land occupied by the Permanent Works
- (ii) The land occupied by approved (usually existing and public) temporary diversion routes
- (iii) The land indicated on the Drawings or subsequently approved (usually public) by the Engineer as borrow areas for materials for pavement construction or as quarries for stone.
- (iv) The land occupied by approved (usually existing and public) access roads to (iii) above.
- (v) The land required for housing, plant-yards, workshops and offices after approval has been given for the locations and layouts of such installations.
- (vi) Subject to the approval of the Engineer, any land lying within the boundaries of the road reserve (generally 60 m in rural areas and 24 m in urban areas, total width, centred on the road centreline) may also be made available to the Contractor as working space or borrow areas for fill material. In forest plantations the width available to the Contractor will be 17.5 m on either side of the centreline.

The Contractor shall make all negotiations and pay all necessary compensation fees for any additional land he may require, including borrow areas for fill material outside the road reserve (if approved by the Engineer).

The land available to the Contractor is not necessarily the land to be cleared, which shall be indicated by the Engineer. The costs of clearing for the purpose of borrowing material, opening access roads, working space, or any other purpose or work not forming part of the Permanent Works shall be borne by the Contractor.

PS 1241: COMPENSATION

The costs of agreed compensation for disturbance of buildings, crops, trees and relocation of fences and services within the land available free of charge shall be paid by the Contractor through the Contract and he shall be reimbursed net under the relevant items in the Bill of Quantities.

The cost of all other compensation shall be borne by the Contractor.

The Contractor shall cooperate with the appropriate authorities and shall make all necessary arrangements to agree compensation. Construction of the Works shall not commence until compensation has been agreed.

PS 1242: GRAVES AND TOMBS

Areas which contain graves and/or tombs within the Site shall be cleared by the Contractor, who shall seek assistance from the District Commissioner to obtain the consent of the Village Authorities to enter into each of such areas for the removal and reburial of corpses and remains. Compensation to the Village Authorities, if any, shall be reimbursed to the Contractor through the Contract under the relevant item in the Bill of Quantities.

PS 1243: COPIES OF SUPPLY ORDERS

The Contractor shall provide the Engineer with copies of all orders for the supply of materials and goods required in connection with the Works.

PS 1244: DRAWINGS

Where applicable, the Contractor shall be issued with two copies of each of the Drawings forming part of the Contract documents, as well as with two copies of any further drawings which may be issued by the Engineer from time to time. Any additional copies of drawings required by the Contractor may be purchased from the Engineer.

PS 1245: AMENITY AND ACCESS

The Contractor shall ensure that, in carrying out the Works, he causes no damage by plant, workmen, flooding, dust, subsidence or otherwise to property. He shall take all precautions to the satisfaction of the Engineer to ensure that such hazards are avoided and public amenity maintained. The Contractor shall make good, forthwith and at his own cost, any damages and inconveniences caused by him; failing to do which the matter shall be treated under Sub-Clause 7.1 of the General Conditions of Contract, as amended, and the Employer shall be entitled to employ and pay other persons to carry out the same, and all costs shall be recoverable from the Contractor by the Employer in accordance with such sub-clause.

PS 1246: DUST CONTROL

The Contractor shall take appropriate measures to protect the Works and adjacent private and public property from dust contamination and nuisance.

PS1247 REPORTING OF ACCIDENTS

The Contractor shall report every accident which occurs on the road, within the extent of the Works, to the Engineer within twenty-four (24) hours of such accident, irrespective of whether such accident has a bearing on the damage to the works or to persons, property or things. The report must be in writing and must contain full particulars of the accident. Photographs of each accident shall also be included in the report. The Engineer has the right to conduct any or all enquiries, on either the Site or elsewhere, as to the causes and consequences of any such accident. The Contractor shall also keep a comprehensive record of all accidents which occur on the road and shall make such records available to the Engineer on demand."

PS 1248 MAXIMISING THE USE OF LABOUR

This Contract has been established and shall be priced as equipment-based type of road works project. However, the Roads Authority is desirous of making a contribution towards reducing the level of unemployment in the project area. To this end, the following items of work have been identified as suitable for maximising the use of manual labour.

- (a) Bush clearing and the removal of roots from the surface after grubbing has been done by machine, and loading of such roots for transport to disposal areas.
- (b) Excavation and backfilling for culverts, kerbs and channels, including for removal of existing units, all to a maximum depth of 1,5m.
- (c) Excavations for guardrail posts, road sign footings, guide blocks and erosion protection works, all to a maximum depth of 1,5m.
- (d) Constructing gabion baskets and stone pitching.
- (e) Placing of kerbs and concrete edging.
- (f) Erection of road signs.
- (g) Base correction.
- (h) Back chipping during surfacing operations.
- (i) Trimming of cut slopes, and final trimming of shoulder breakpoints and fill slopes.
- (j) Trimming of open drains, side drains, inlet and outlet channels of culverts.
- (k) Trimming of catch - water drains, mitre banks and mitre drains.
- (l) Finishing off the road, road reserve and borrow pits.

Tenderers are required to submit a tender for the Works under the condition that at least the items listed above must be done using manual labour. Additional information and suggestions which will further the use of labour will be viewed in a positive light.

The Employer is also desirous of making a contribution towards equal opportunities for women, not only in respect of labour, but also throughout the human resource base of the Contract. No gender restrictions shall apply throughout the workforce. In respect of the latter and as far as is practicable, the Contractor is required to employ at least 15% of his unskilled labour force from the feminine gender. In addition, only Malawian citizens shall be employed in the Contractor's unskilled labour force.

PS 1249 HIV/ AIDS PREVENTION PROGRAMME

The contractor shall from the commencement of the contract through his SHE-Officer implement a generic HIV/AIDS awareness training programme for all permanent and temporary workers of the main contractor and all subcontractors. The type of training; the number of trainees and the cost of all training shall be as agreed by the Employer and the Engineer.

The training material for the structured training programme shall, as far as possible, be accredited by the appropriate Government of Malawi Authority and be delivered by suitably qualified and accredited trainers. The training programme shall be subject to the approval of the Employer and the Engineer, and the Contractor shall if so instructed by the Engineer, alter or amend the programme and course content.

The Contractor shall be responsible for the provision of everything necessary for the delivery of the training programme, including the following:

- Transport of the selected workers(as necessary)
- Stationery and all other necessary materials.

No separate payment will be made for the training venue and everything necessary for the delivery of the training.

All Training shall take place during normal working hours and the Contractor shall make adequate allowance in his programme of work to accommodate the training to be provided. All selected workers shall be remunerated in respect of all time spent undergoing skills training. The SHE-Officer must make sure that the specified workers attend the HIV/AIDS Prevention training courses.

The Contractor shall keep comprehensive records of the training given to each worker and whenever required shall provide copies of such records to the Engineer. At the successful completion of a course, each candidate shall be issued at the Contractor's own cost with a certificate.

The Contractor shall ensure that all attendees sign an attendance register, and shall provide the Engineer with a copy of the attendance register the day after each course. The SHE-Officer shall prepare a quarterly report on the programme.

SECTION 1300 CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

PS 1303: Payment

PS 13.01: The Contractor's General Obligations

Add the following paragraph after the fourth paragraph (numbered as (iii):

(iv) The combined total amount of pay item 13.01(a), 13.01(b) and 13.01(c) shall not exceed 15% of the tender sum

Add the following new pay items:

PS 13.02:	Authorised Compensation	Unit
(a)	Provisional Sum for Authorised Compensation.....	Provisional Sum
(b)	Handling Cost and profit in respect of item PS 13.02(a).....	%

The contractor has to enter the percentage in the rate column and then calculate the amount for pay item PS13.02 (b)

PS13.03: Relocation of Services:

- (a) Provisional sum allowed for the protection and relocation of services Provisional sum
- (b) Handling Cost and profit in respect of item PS13.03(a).....%

The contractor has to enter the percentage in the rate column and then calculate the amount for pay item PS13.03 (b)

The provisional sum allowed under sub item (a) shall be expended to cover the actual costs for the protection and moving of services by the Contractor and others.

The provisional sums shall be expended only with the approval of the Engineer.

PS 13.04: Construction of Sign Boards.....No.

The unit of measurement shall be number of construction sign boards supplied.

The tendered rate shall include full compensation for procurement, erection and removal of construction sign boards after completion of the project.

The sign board has to comply with the particular drawing.

PS 13.05: Contractor's Environmental Obligations

- (a) Fixed obligations.....lump sum
- (b) Time-related obligations..... month

The lump sum tendered under Item PS13.05 (a) shall represent full compensation for the fixed part of the Contractor's obligations in respect of environmental matters for the Contract, i.e. that part which is substantially fixed and not a function of the time required for the completion of the contract or of the value of the work.

Payment of the lump sum tendered under Item PS13.05(a) shall be effected in the same manner as that described in Clause 1303 of the Specifications for Item 13.01(a).

The monthly rate under item PS13.05 (b) shall represent full compensation for the time-related part of the Contractor's Environmental obligations as specified in the Environmental Regulations in Clause PS 1239 of the Project Specifications

and elsewhere in the contract documents, for which payment is not included under other Pay Items.

Payment of the tendered rate per month for Item PS13.05 (b) will be subject to the same terms and conditions as are described in Clause 1303 of the Specifications for Item 13.01(c).

Payment will be made monthly over the full Time for Completion, as defined in the General Conditions of Contract.

Where the Contractor does not comply fully with his environmental obligations, and where he has been notified to that effect in writing at least three times since the Commencement Date, he may forfeit payment in terms of Clause PS 1239 of the Project Specifications.

(c) Public Awareness Programmes

(i) Television and Radio Broadcast and Print Media Publications
P.S.

(ii) Handling costs and profit in respect of sub-items PS13.05(c)(i)
(stated as % and extend as an amount)..... %

The provisional sum for sub-item PS13.05(c)(i) allows for the provision of the Public awareness programmes and activities provided as specified in the document. This money shall only be expended on the direct instruction of the Engineer. The reimbursement shall be for the final invoice amount from the public awareness service providers (excluding VAT).

The provisional Sum allowed for pay item PS13.05(c)(i) is to remunerate the public awareness service providers at a rate agreed by the Roads Authority. The reimbursement shall be for actual costs incurred.

The percentage tendered for pay item PS13.05(c)(ii) shall be applied to the amounts expected under pay items PS13.05(c)(i) to generate an amount that covers all the monies required by the Contractor for managing the public awareness activities, paying the media service providers, and any other costs that may arise from these payments, including any Contractor's profits and overheads

PS 13.06: Contractor's Health Obligations

(a) Fixed obligations.....lump sum
(b) Time-related obligations.....month

The lump sum tendered under Item PS13.06 (a) shall represent full compensation for the fixed part of the Contractor's obligations in respect of health matters including HIV and AIDS awareness for the Contract, i.e. that part which is substantially fixed and not a function of the time required for the completion of the contract or of the value of the work.

Payment of the lump sum tendered under Item PS13.06(a) shall be effected in the same manner as that described in Clause 1303 of the Specifications for Item 13.01(a).

The monthly rate under item PS13.06 (b) shall represent full compensation for the time-related part of the Contractor's Health obligations as specified in the Special Conditions of Contract Clause 64.

Payment of the tendered rate per month for Item PS13.06 (b) will be subject to the same terms and conditions as are described in Clause 1303 of the Specifications for Item 13.01(c).

Payment will be made monthly over the full Time for Completion, as defined in the General Conditions of Contract.

Where the Contractor does not comply fully with his health obligations, and where he has been notified to that effect in writing at least three times since the Commencement Date, he may forfeit payment.

PS 13.07 Contractor's mobilisation per emergency or urgent call out.....No.

The unit of measurement shall be the number of call outs by the Employer or his representative in cases of emergency or other urgent reasons.

The tendered rate shall include full compensation for transport of the required staff and construction materials to the relevant site. The payment of the rate implies immediate response to the call out. Compensation for transportation of equipment shall be covered under Day Works, item 18.05.

SECTION 1400 HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

PS1407 MEASUREMENT AND PAYMENT *Create the following pay items*

PS14.15 Survey equipment for use by the Engineer.....month

- ✓ The unit of measurement for the maintenance of the survey equipment including software programme shall be the month.

The tendered rate shall include full compensation for the supply and maintenance of the equipment. The tendered sum per month will be payable for as long as the equipment is required, but not after the official completion date of the contract.

PS14.20 Provision of semi-skilled labour for use by the Engineer

(a) Provision of Labourers.....provisional sum(P/sum)

(b)Charges and profit in respect of PS14.20 (a)

(State % and extend as an amount)..... percentage (%)

Payment under Item PS14.20 (a) shall be made monthly and the amount due to the Contractor will be equal to the total of the actual amount paid to the Engineer's semi-skilled labourers plus the direct cost of medical and pension benefits, Workmen's Compensation, sick leave and holiday pay, incurred by the Contractor in respect of the Engineer's semi-skilled labourers. The Contractor shall advise the Engineer of the full monthly cost for each semi-skilled labourer engaged. No payment other than that provided above will be made in respect of the employment of semi-skilled labourers for the Engineer. Contract price adjustment will not apply to this item.

PS14.21 Provision of Length – Person

(a) For roads in rural areas.....man-month

(b) For roads in urban areas.....man-month

The unit of measurement shall be person-months based on a calendar month, assuming continuous assignment and full-time availability, and that the prioritised list of tasks is attended to in a diligent manner. Payment shall include for all training and supervision, direct and indirect costs of providing the length-person, the provision, maintenance and replacement as required, of the basic tools stipulated above, protective clothing, wages, allowances, transport (where required), attending for inspections, providing freely available materials such as suitable fill, and all incidentals necessary to complete the work as specified.

SECTION 1500 ACCOMMODATION OF TRAFFIC

PS1502 GENERAL REQUIREMENTS

- ✓ *Add the following new sub – clauses:*

(i) **Moving and display of signs**

The Contractor shall adhere strictly on the sign layout and spacing shown on the drawings or directed by the Engineer. Any sign not required for or which is in contradiction with the prevailing situation, shall be removed or covered with non-transparent material without delay. Where permanent signs are to be covered it shall be done with non-plastic material.

(j) Failure to comply with provisions for the accommodation of traffic

The failure of or refusal by the Contractor to construct and / or maintain diversions, barricades, traffic signs or road markings at the proper time, or to take the necessary precautions for safety and convenience of public traffic as specified or instructed by the Engineer, shall be sufficient cause to suspend payment on this contract until the required construction or maintenance has been completed to the satisfaction of the Engineer considering that there is a risk to the public. Such stoppage of the payment will not be acceptable as a reason for extension of time or additional compensation.

PS1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

✓ ***Add the following after the second paragraph:***

No work may proceed in any section where accommodation of traffic is required until such time as the relevant requirements with regard to sign posting are met. The Contractor shall keep sufficient surplus signs, delineators and barricades on the site to allow for the replacement of damaged or missing items within a period of three hours of instructions having been given by the Engineer.

(a) Traffic-control devices

✓ ***Add the following:***

Sufficient flagmen suitably trained and equipped as detailed in sub-clause (g) below, shall be provided at all designated access points on public road to and from the working areas to the satisfaction of the Engineer. The flags shall be at least 750 mm x 500 mm on a stick of adequate length.

When movable temporary signs are used, provision shall be made for sandbags on the sign bases to prevent the signs from being overturned by wind or eddies behind moving traffic, as detailed in sub-clause (h) below.

(b) Road signs and barricades

✓ ***Add the following:***

Retro-reflective material for temporary road signs shall comply with the requirements of SABS 1519.

The retro-reflective coefficients determined according to the methods of SABS 1519, shall be at least 60% of the values given in Table 1 of SABS 1519.

The classes shall be as specified in Sub-clause 5402 (g) of the Standard Specifications.

Road signs that do not comply with these standards shall be cleaned and re-tested or removed from the site and replaced with approved road signs.

(c) Channelization devices and barricades

✓ ***Add the following:***

Delineators shall comply with the following requirements:

- (i). A minimum contrast ratio of 4 shall exist between the yellow call 1 retro-reflective material and the black non-reflective material.

- (ii). Delineators shall be affixed in a flexible manner to the base units and shall be able to withstand wind speeds of at least 60 km/h without overturning. The bases shall be stabilised by placing of sandbags.
- (iii). The bottom edge of the delineator shall not be more than 200 mm above the road surface.

Cones (red-orange, fluorescent) with minimum height of 750 mm may be used as supplementary traffic-control facilities to delineators, but only for short-term lane deviations during daylight. Lane closures or deviations continuing into night time shall be demarcated by delineators. The maximum spacing between delineators or cones is 30 m.

✓ ***Add the following sub-clauses:***

(g) Worker clothing and safety jackets

All construction workers shall wear high visibility clothing when on the construction site. Any worker working on or adjacent to a trafficked road shall wear a safety jacket (reflective vests). Overalls shall be either orange or red-orange or yellow in colour with retro-reflective strips. Raincoats shall be bright orange or red-orange.

In addition all flagmen are to be distinctly dressed in high visibility orange overalls, a safety jacket similar to those worn by traffic officers as supplied by Sparks and Ellis or similar approved. Safety jackets shall also be made available to the Engineer and all his staff free of charge.

SECTION 1600 OVERHAUL

PS1601 Scope

- ✓ ***Free-haul distance for this contract will be unlimited. Subsequently no separate payment will be made for overhaul irrespective of the material or the distance hauled.***

SECTION 1700 CLEARING AND GRUBBING**PS1701 Scope****Add the following to this Clause:**

This section also includes the cutting of grass and bushes along the road to improve visibility. The grass, shrubs and bush shall be cut 50 mm to 100 mm above the ground. The width of cutting shall be 3m to 10m from the edge of the road where grass starts to grow or as directed. This scope shall also include the cutting of tree branches leaning onto the road wherever applicable.

The scope of works shall also include excavation and disposal of any debris in the road reserve
The scope of works shall also include the treatment of anthills, .

PS1703 EXECUTION OF THE WORK**(a) Areas to be Cleared, Grubbed and Stripped**

At the end of this sub-clause add the following:

Removing topsoil too far in advance of excavation or filling operations may also cause re-clearing and re-grubbing. Payment for clearing and grubbing shall be made only once. Re-clearing and re-grubbing shall be at the Contractor's own cost.

(b) Cutting of Trees

At the end of this sub-clause add the following:

Individual trees designated in writing by the Engineer shall be left standing and uninjured. A penalty of MK100,000.00 shall be imposed for every tree which is unnecessarily removed or damaged. The branches of trees to be left standing shall be trimmed so as to leave a 7 m clearance above the carriageway.

PS 1704: Measurement and Payment**Add the following new pay items:**

PS 17.04: Cutting and removal of tree branches.....No.

If necessary and as instructed by the Engineer, tree branches shall be cut in sections from the top downwards. The branches to be left standing shall be trimmed so as to have a 7m clearance above carriageway. Necessary precaution shall be taken to prevent damage to structures and other private and public property. Individual trees designated in writing by the Engineer shall be left standing and uninjured.

The unit of measurement shall be number of tree branches exceeding 300mm girth cut. The girth shall be measured at the narrowest point of the tree or branch. The tendered rate shall include full compensation for all work necessary for the cutting, removal and disposal of all material.

PS 17.05: Clearing and grubbing, demolition of existing structures

Item	Unit
PS 17.05(a): Masonry structures.....	metre (m ³)
PS 17.05(b): Concrete structures	metre (m ³)
PS 17.05(c): Brickwork	metre (m ³)
PS 17.05(d): Gabions	metre (m ³)

The tendered rate shall include full compensation for demolition of the existing structures and disposal of the waste material from site including unlimited haulage costs.

PS 17.06: Debris Excavation and Disposal.....Cubic Metre (m³)

In areas designated by the Engineer the Contractor shall remove and spoil outside the road reserve area, soil which is deemed unsuitable. The limits to the areas considered to contain unsuitable materials shall be measured and ground elevations taken by the Engineer before and after excavation. The contractor shall dispose the unsuitable material in a location acceptable to the Engineer.

The volume of excavation shall be calculated in cubic metres using the Average End Area method and the result of these calculations shall form the basis for payment for this item. The unit price paid per cubic metre shall be full compensation for all costs related to excavation, loading, hauling and disposing of the unsuitable material including levelling as directed by the Engineer. No overhaul will be paid for this material.

PS 17.07: Shrubs and Grass Cutting.....Square Metre

Measurement shall be in square metres. Length shall be measured along the centre line of the road. The width shall generally be measured from the shoulder break point into the road verge as instructed by the Engineer. Excessive shrubs shall be determined case by case by the Engineer whether to include in the shrubs and grass cutting rate or to pay as a unit item under bush clearing (PS 17.08)

PS 17.08: Bush Clearing.....Square Metre

Measurement shall be in square metres. The quantity shall be taken as the area in square metres within the road reserve as designated by the Engineer and cleared by manual labour in accordance with these specifications. The tendered rate shall include full compensation for all work necessary for the clearing, removal and disposal of all cleared material.

PS 17.09: Treatment of Anthills.....Number

Where anthill material is encountered within the road prism, the contractor shall excavate to a depth of 0.6m below existing ground level over an area as directed by the Engineer. The excavated area shall be treated with an approved pesticide and backfilled with suitable material compacted to specifications.

The rate of payment shall be the number of anthills treated. This rate shall cover the provision of labour, tools, approved pesticides, road signs and safety devices. Excavation and backfilling shall be paid for under their appropriate pay items

✓ **Create the following new section:****SECTION PS 1800: DAY WORKS****PS1801 SCOPE**

This section covers the listing of day work items in accordance with the General and/or Special Conditions of Contract determining payment for work which cannot be quantified in specific units in the Schedule of Quantities, or for work ordered by the Engineer during the construction period which was not foreseen at tender stage and for which no applicable rate exists in the Schedule of Quantities.

PS1802 ORDERING OF DAYWORK

No day work shall be undertaken unless written authorisation has been obtained from the Engineer.

PS1803 MEASUREMENT AND PAYMENT

Item	Unit
PS18.01 Personnel during normal working hours	
(i) Unskilled labour	hour (h)
(ii) Semi-skilled labour	hour (h)
(iii) Skilled labour	hour(h)
(iv) Ganger.	hour (h)
(v) Flagmen.	hour (h)
(vi) Surveyor	hour(h)
(vii) Lab technician	hour(h)

Item	Unit
PS18.02 Personnel outside normal working hours	
Outside normal working hours .	
(a) Unskilled labour	hour (h)
(b) Semi-skilled labour.	hour (h)
(c) Skilled labour.	hour (h)
(d) Ganger.. . . .	hour (h)
(e) Flagmen.. . . .	hour (h)
(h) Surveyor	hour (h)
(i) Lab. Technician	hour (h)

Item	Unit
PS18.03 Plant	
(a) Tip Truck 6m ³	hour (h)
(b) Tip truck 10m ³	hour (h)
(c) Motor grader (type specified)	hour (h)
(d) Wheeled loader (type specified)	hour (h)
(e) Water bowser – self propelled (capacity specified)	hour (h)
(f) Vibratory roller	hour (h)
(g) Pneumatic roller	hour (h)
(h) Grid roller with tractor (type specified)	hour (h)
(i) Tractor (type specified)	hour (h)
(j) Tracked excavator (type specified)	hour (h)
(k) Bulldozer (type specified)	hour (h)
(l) Excavator	hour (h)
(m) Concrete Mixer	hour (h)
(n) Water Pump.	hour (h)

The unit of measurement for items PS18.01 to PS18.03 shall be the hour for the item of plant or personnel. Non- working hours for the plant breakdown, lack of operator or any other reason shall not be measured. The item shall be taken from the time that the personnel and /or plant depart until return.

Measurement shall only be for work instructed and directed by the Engineer where the Engineer consider no other appropriate rates is available in the schedule of quantities. Prior to the commencement of any work by the labourers described under items PS18.01 and PS18.02, the Contractor must obtain written consent from the Engineer regarding the classification of all labourers in terms of “unskilled”, “semi skilled”, and “skilled labourers”

The tendered rates for labour for the items PS18.01 and PS18.02 shall include full compensation to cover overhead charges and profit, leave pay, bonuses, subsistence allowances, Employer’s contributions, additional payment for over overtime where applicable, insurances, housing, site supervision, use of small hand tools and appliances, non-mechanical plant, operative and contingent costs relating to the supply of personnel.

The tendered rates for Plant for item PS18.03 shall be all-inclusive hire charge for the use of trucks or plant/equipment including driver or operator and shall apply only to vehicles, plant and equipment nominated in writing by the Engineer.

Item	Unit
PS18.04 Materials	
(a) Procurement of materials.....Provisional Sum (P/Sum)	
(b) Contractor’s handling costs, profit and all other charges in respect of sub item PS18.04(a). Percentage (%)	

The Unit of measurement for sub-item PS18.04(a) shall be the amount actually paid for the procurement of materials to be purchased and shall be made in accordance with

the provision of the General Condition of Contract. Only the actual quantities of materials used, as verified by the Engineer, shall be paid for.

The percentage tendered for sub-item PS18.04(b) shall be the percentage of the amounts actually paid for the procurement of the materials as ordered under the sub-item PS18.04(a) and shall be in full and final compensation in respect of the Contractor's handling costs, profit, and all other charges in connection with the procurement and supply of the materials to the point of usage.

Item	Unit
PS18.05 Transport	
(a) LDV.	kilometre (km)
(b) Flatbed Truck	kilometre (km)
(c) Lowbed Truck	kilometre (km)

The unit of measurement for item PS18.05 shall be the kilometre distance that the vehicle travelled for transporting personnel and/or Plant. All travelling shall be approved by the Engineer.

The tendered rate for item PS18.05 shall include full compensation for the cost of the vehicle including fuel, maintenance, depreciation and running costs.

The above-mentioned tendered rates shall be in full compensation for the various items, as specified and not additional compensation shall be considered.

SECTION 2100 DRAINS

PS2103 BANKS AND DYKES

Add the following after the last paragraph

"Mitre banks, catch water banks and dykes shall be constructed using manual labour with the exception of hauling operations when haul distance in the opinion of the Engineer preclude the use of wheel barrows.

The Contractor may, however, construct certain banks and dykes using conventional plant based methods where manual methods are not feasible provided that his reasons for using these conventional methods are adequately motivated in writing and approved by the Engineer.

Work executed using manual labour will be measured and paid for separately from work carried out using conventional methods."

PS2107 MEASUREMENT AND PAYMENT

Add the following items:

Item	Unit
PS21.20 Excavation for open drains using manual labour:	
(a) Hand excavation soft material situated within the following depth ranges below the surface level:	
(i) 0m up to 1.5m.....	cubic metre (m ³)
(b) Extra over sub-item PS21.20 (a) for excavation in the following classes of material, irrespective of depth:	
(i) Hand excavation of intermediate material.....	cubic metre (m ³)

The unit of measurement shall be the cubic metre of material excavated using manual labour in accordance with the authorised dimensions, measured in place before excavation. Excavation for open drains only as defined in Sub-clause PS2102 shall be measured.

Irrespective of the total depth of the excavation, the quantity of material in each depth range shall be measured and paid for separately.

The tendered rates shall include full compensation for using manual labour for excavation of the material to the required lines, levels and grades, trimming and the disposal of the material as directed.

For payment purposes a distinction shall be made between the various classes of material.

Item	Unit
PS21.21 Banks and Dykes using manual labour.....	...cubic metre (m³)

The unit of measurement shall be the cubic metre of material placed by manual labour, measured in place in the banks or dykes, and calculated in accordance with the authorised dimensions.

The tendered rate shall include full compensation for using manual labour for procuring, furnishing, placing, watering, compacting, shaping and trimming the material in the banks and dykes.

PS 21.22 Drain Clearing:

(a) Line Drains

(i) < 500 mm bottom width.....metre

(ii) > 500 mm bottom width.....metre

(b) Unlined Drains

(i) < 1000 mmmetre

(ii) > 1000 mmmetre

This item shall include the removal of debris, sediment and other obstructions from the side drains using hand tools and labour. It shall also include the restoration of geometry and hydraulics of the side drains to ease the flow of water. Soil excavated from the drain shall be taken to spoil beyond the side drain where it shall not wash back to the side drain.

PS 21.23 Drain Blading:

(a) < 1000 mmmetre

(b) > 1000 mmmetre

The task comprises the mechanical cleaning and reshaping of unlined (earth) roadside and mitre drains by motor grader. The technique is suited to V-shaped and relatively wide flat-bottomed ditches. Trimmed material is moved well clear of the highway to the rear side of the drain where it cannot wash back into the drain.

The works shall be measured in metres (m) of drain run, existing and new turnouts, measured individually on each side of the road. This shall include all necessary handwork in the vicinity of obstructions and where access is constrained, and for the complete removal and disposal of trimmed materials including haulage off-site where necessary. Physical measurements of length shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

SECTION 2200: PREFABRICATED CULVERTS**PS2203 MATERIALS**

✓ **Add the following sub-clause:**

(j) Steel reinforcement

Steel reinforcement for inlet and outlet structures, manholes and other appurtenant structures shall comply with the requirements of section 6300 of the standard specifications.

PS2204 CONSTRUCTION METHODS

✓ **Add the following to this sub-clause:**

✓ **Culverts shall be constructed using the trench method as described in paragraph (a)**

PS2211 BACKFILLING OF PREFABRICATED CULVERTS

✓ **Amend the first paragraph of sub-clause (a) to read as follows:**

The material used for the back-filling alongside the culvert shall be selected material of at least G7 quality. Where the excavated material is not of adequate quality selected material shall be imported for this purpose. The material placed over the top of the culvert shall be of the same quality as that of the road pavement at a similar depth but in any event of at least G7 quality."

PS2218 MEASUREMENT AND PAYMENT

Add the following new pay items

Item	Unit
PS22.29 Excavation for culvert using manual labour	
(a) Hand excavation, soft material situated 0m up to 1.5m below the surface level.....cubic metre (m ³)	
(b) Extra over sub-item PS22.29(a) for excavation in intermediate material irrespective of depth.....cubic metre (m ³)	

PS22.30 Backfilling using manual labour

- (a) Using the excavated material.....cubic metre (m³)
- (b) Using imported selected material.....cubic metre (m³)
- (c) Extra over sub-item PS22.30 (a) and (b) for soil cement
backfilling (5% cement).....cubic metre(m³)
- (d) Concrete backfill (Class 15/19).....cubic metre(m³)

PS 22.31 Culvert Cleaning:

- (a) Pipe Culverts
 - (i) < 600 mm diameter.....metre
 - (ii) > 600 mm diameter.....metre
- (b) Box Culverts
 - (i) < 900 x 600 mmmetre
 - (ii) > 900 x 600 mmmetre

The unit of measurement shall be the running metre of culvert cleaned. The tendered rate per metre shall include the cutting of vegetation at least 3m distance in both the down stream and up stream channels of the culvert. It also includes the removal of debris, sediment and other obstructions from the culvert barrel, inlet and outlet structures. If in the course of cleaning the culvert any damages to the culvert, such as broken or dislocated pipes, eroded aprons, undermining, etc., are noticed, these will be dealt with under relevant pay items and shall be treated as additional works. The rate shall also include full compensation for all the costs associated with the disposal of the excavated debris, sediments and obstructions off site.

PS 22.32 Removal of graffiti from structures.....square metre

The unit of measurement shall be the area of the restored surface cleaned on instruction from the Engineer.

The tendered rate shall include full compensation for all labour, cleaning materials, patent products (e.g. Synchrokleen or similar), equipment, transport and overheads necessary for restoration of the surfaces.

**SECTION 2300 CONCRETE KERBING, CONCRETE CHANNELLING, OPEN
CONCRETE CHUTES AND CONCRETE LININGS FOR OPEN DRAINS**

PS2302 MATERIALS

(d) Bedding material

✓

Add the following:

A class 15/13 semi-dry concrete mix shall be used unless otherwise directed by the Engineer

PS 2307 MEASUREMENT AND PAYMENT

✓

Add the following to pay item 23.07

PS23.07 The trimming of excavation for concrete lines or for cement mortared stone masonry open drains should be done by using manual labour.

✓

Add the following to pay item 23.08

PS23.08 The tendered rate for surface finish shall also include full compensation for the required formwork as described in pay item 23.09.

✓

Add the following new pay item :

PS 23.09 Lining of drains

(a). Lining for open channel horizontal or inclined with stone masonry to a thickness between 250 and 350 mm including pointing.....square metre

The unit of measurement shall be the square metre of masonry built. The tendered rate per square metre shall include full compensation for the construction material including transport to site, the masonry work completed as specified.

SECTION 2500 PITCHING, STONEMWORK AND PROTECTION AGAINST EROSION

✓

Add the following to Clause 2501 – Scope:

This section covers also the hand repair of erosion gullies and minor slips occurring in road shoulders, verges or drain sides. The work involves the trimming and preparing of the cuts and reinstating with compacted selected fill in order to achieve the original feature shape. The repair of the cut should be made after investigation and corrective works to prevent further concentration of water flows at the location (performed as a separate Item).

The construction of check dams in the road side ditches will be required on steep grades where the in-situ material is very erodible. Therefore at locations designated by the Engineer, the Contractor will build masonry check dams in the road side ditches as instructed by the Engineer.

PS 2509**Add the following clause:**

Material underlying the stone pitching shall be adequately compacted as directed by the Engineer

PS25.08 MEASUREMENT AND PAYMENT

✓

Add the following new pay item to 25.01 Stone Pitching:**PS 25.01(e) Mortar****Stone****Pitching:.....m²**

The unit of measurement shall be the square metre of mortar stone pitching. The tendered rate per square metre shall include full compensation for the construction material including transport to site, the pitching work completed as specified to a thickness between 250 and 350 mm including pointing.

✓

Add the following new pay items**PS 25.08 Erosion****Damage****Repair:.....m³**

The works shall be measured in cubic metres (m³) of compacted backfill material including that used to reinstate benches, accepted in place after compaction. Physical measurements of length, breadth and thickness of the hole shall be recorded and comprise a pre-estimate of the necessary work including the backfilling of all cut benches. Sufficient sections shall be measured to give an accurate representation of the actual work performed. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 25.09 Check**Dams:.....Cubic Metre**

The unit of measurement shall be the cubic metre of masonry built. The tendered rate per cubic metre shall include full compensation for the construction material including transport to site, the masonry work completed as specified to a thickness between 250 and 350 mm including pointing. Backfilling in between successive check dams if required shall be paid for under the appropriate pay items.

SERIES 3000: EARTHWORKS AND PAVEMENT LAYERS OF GRAVEL OR CRUSHED STONE
SECTION 3100: BORROW MATERIALS

Delete the entire Section and insert the following requirements which shall apply:

- a) The Contractor shall obtain materials of the specified quality from any source of their choice.
- b) Prior to opening any borrow pit or quarry, the Contractor shall submit to the Engineer a scanned original of the mining permit or a copy certified by the Chief Mining Engineer.

No separate payment shall be made for this item. Payment shall be built in the related work items.

The quantity under which item (b) above will apply, shall be as determined or directed by the Engineer

SECTION 3200 SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS AND CUTTINGS, AND PLACING AND COMPACTING THE GRAVEL LAYERS

PS3202 SELECTING THE MATERIALS

Add the following:

The quality of the materials in the borrow pit is inconsistent. Good quality material is often limited to small pockets. It may therefore be necessary to stockpile and mix materials to ensure that the quality of the material will comply with the specified requirements for a particular layer for which it will be used. The cost for these processes shall be deemed to be covered by the rates for the various items of work for which these materials are used.

PS 3206 CONTROLLING THE MOISTURE CONTENT OF MATERIALS

✓ Add the following to the third paragraph:

The time required for doing work to accelerate the drying out of wet material or for dealing with wet material as described above, shall not be regarded as part of a delay caused by inclement weather in terms of clause PS 1215.

SECTION 3300 MASS EARTHWORKS**PS3301 SCOPE**

✓

Add the following to Clause 3301:

This section also covers the excavation of material in the river channel near drainage structures, so that easy flow of water is maintained so that drainage structures and embankments are protected from erosion and/or undermining. It also includes the removal of flood deposited material at crossings to restore openings of bridges and culverts so that overflowing is controlled.

The scope shall also include maintenance activities of earth roads.

PS3305 TREATING THE ROADBED**(a) Removing unsuitable material**

✓

Add the following to the first paragraph of this sub-clause:

Roadbed material within 1.0 m of the finished road level shall have a minimum CBR of 3 at 90% of modified AASHTO density, after compaction. Any material which does not meet this requirement shall be treated as unsuitable and removed.

PS 3312 MEASUREMENT AND PAYMENT

Delete in pay – items 33.01, 33.02, 33.04 and 33.07 the wording “including free – haul up to 0.5 km” and replace with: “including unlimited free – haul distance”.

✓

Replace pay Item 33.01, Cut and borrow to fill (a) and (b) with the following:

Item	Unit
PS 33.01 Cut and borrow to fill including unlimited freehaul distance	
(a) Gravel or soft material in compacted layer thicknesses of 300 mm and less	
(viii) compacted to 90% modified AASHTO densitycubic metre
(ii) compacted to 93% modified AASHTO densitycubic metre

✓

Replace pay Item 33.07, Removal of unsuitable material (a) and (b) with the following:

PS 33.07 Removal of unsuitable material
:.....m³

The unit of measurement shall be the cubic metre of unsuitable material removed by the contractor in accordance with the Engineer's instructions irrespective of layer thicknesses and stability of the material. The tendered rate shall include unlimited free haul distances.

✓

Add the following new pay items**PS 33.14 River**

Training:.....m³

River training shall be paid per cubic metre of material removed. The rate shall include the operation of excavation plant, removal and transportation to spoil of excavated material. The repair and maintenance of the drainage structures shall be covered elsewhere in appropriate items

as determined by supervising engineer or as shown in the drawings where available. All soils used in reshaping the road section shall be free of organic or other unsuitable matter.

As there might be no designed profile grade for roadbeds in question, the elevation of the reshaped road surface will be determined by the Engineer according to the amount of material brought in from the adjoining side drains, road reserve and other borrow areas (unlimited free haul) to be incorporated into the existing surface.

The works shall be measured in kilometres (km) of full width of road (side drains inclusive). Payment shall include all described works to the roadway inclusive of scarifying, watering and compaction. Mitre drains shall be paid separately under their applicable item 21.01. Physical measurements of road length shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, equipment, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 33.19 Localised Gravelling of Earth Roads:.....Cubic Metre

The task comprises the supply and laying of specified selected road wearing course gravel to achieve a uniform layer thickness together with shaping, watering and compaction within localised areas on earth roads.

The works are normally performed when the existing earth road has been eroded or otherwise damaged in a localised section. Mechanical compaction and material watering for moisture control are mandatory. Any necessary improvements / repairs to the road drainage system should be carried out as a separate activity in advance of these regravelling operations.

The works shall be measured in cubic metres of selected road gravel measured in its finally compacted condition. Normal measurements shall be based on specified thickness, instructed width and measured length. Alternatively, if agreed with the Employer's Representative the quantity shall be taken as being 70% of the loose volume of delivered gravel surfacing material measured in the trucks. Full-load measurements must be agreed for each truck in advance of deliveries commencing and will normally be based on number of volumetrically checked shovel buckets. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials, compaction works and all incidentals necessary to complete the work as specified.

SECTION 3400 PAVEMENT LAYERS OF GRAVEL MATERIAL

PS3401 SCOPE

✓ **Add the following to Clause 3401**

This section also includes shoulders reconstruction, trimming and repair using plant, labour and gravel material when long sections have been damaged. This item covers all the shoulder preparatory and cleaning works, grading, scarifying and filling with gravel or crusher run that qualifies as base material and compacting of shoulders to restore shape and slope for easy flow of water and also for use by vehicles wishing to park off the carriageway.

PS3402 MATERIALS

✓ **Add the following to (a) General**

The material test results for the available gravel material on the various borrow pits in general showed a high plasticity index (PI). The quantity of gravel material complying to the requirements of the standard specifications is limited.

✓ **Change Clause 3402 (b) as follows:**

The maximum plasticity index of the natural material for selected layer shall be 25%

✓ **Change Clause 3402 (c)(ii) as follows:**

The maximum plasticity index of the natural material for sub - base shall be 20%

✓ **Change Clause 3402 (d)(ii) as follows:**

The maximum plasticity index of the natural material for base shall be 12%

PS3403 CONSTRUCTION

(b) Placing and compaction

Shoulders

✓ **Add the following:**

Shoulders shall be constructed from the same material as the base

✓ **Add the following sub-clause PS 3403 (g)**

Shoulder Reconstruction

The activity consists of reshaping, scarifying, patching and generally building up the level and shape of deformed or eroded shoulders (normally to bitumen surfaced roads) to regain originally designed profiles. The fill material shall be obtained from areas of cut (where suitable) or other approved borrow pits. Deep or localised erosion cuts should be repaired as a separate operation using Item PS25.08. The aim is to provide continuous support to the pavement edge and to allow rainwater falling on the road to uniformly run off the road shoulders without concentrating in channels.

✓ **Add the following sub-clause PS 3403 (h)**

Shoulder Trimming

The activity comprises the manual trimming down of high or inadequately sloped shoulders adjacent to roads and the removal of that material to approved dump sites. The operation is

intended to remove material that builds up gradually in shoulders and prevents the uniform discharge of water from the road surface into the drainage ditches.

✓ **Add the following sub-clause PS 3403 (i)**

Shoulder Repair

Where the shoulders to a paved road have been damaged such that potholes, gullies, vehicle ruts, excessive drop, corrugations have formed, they shall be repaired using hand labour, tools and local borrow. The repair shall be such that the shoulder is well trimmed, filled and sloped to approximately 4% ~ 6% so that there shall be no ponding of water and drivers do not hesitate to park on it.

PS3407 MEASUREMENT AND PAYMENT

✓ **Change pay item 34.01 as follows:**

Delete the wording "including free – haul up to 1.0 km" and replace with "including unlimited free – haul distance".

✓ **Delete the second paragraph (payment paragraph) of item 34.01 and substitute with the following:**

The tendered rates shall include full compensation for mixing, watering, placing and compacting the material supplied under item PS34.01, and the protection and maintenance of the layer and the conducting of control tests, all as specified.

✓ **Add the following new pay items**

PS 34.05 Shoulder

Reconstruction:.....m³

Gravel shoulder compacted to 98% of modified AASHTO density with minimum thickness of 150mm

The works shall be measured in cubic metres of selected material accepted in the road shoulder measured after compaction. Physical measurements of length, width and average thickness shall be recorded. Where agreed in advance with the Employer's Representative, equivalent compacted volume may be estimated by the application of a compaction factor (typically 70%) applied to the loose delivered volume of material. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 34.06 (i) Shoulder

(Manual):.....km

Trimming

PS 34.06 (ii) Shoulder

(Mechanical):.....km

Trimming

The works shall be measured in metres (m) of road shoulder measured separately on each side of the road. This shall include the complete removal and disposal of trimmed materials including haulage off-site. Physical measurements of length shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 34.07 Shoulder Spot
Repairs:.....m³

The rate of payment shall be per cubic metre of material placed from borrow. This rate shall cover the preparation of the shoulder surface for patching, the excavation and transport of local borrow, placing, levelling, and compacting. It shall also cover for the provision of labour, tools, road signs and safety devices.

PS 34.08 Access Ramp to Adjoining
Property:.....m³

The unit of measure shall be cubic metre. The unit price paid per ramp shall be full compensation for all work required in connection with constructing the ramp, including the furnishing of all necessary labour, materials and incidentals.

PS 34.09 Spot Repair of Gravel
Roads:.....m³

The task involves the hand repair of potholes, ruts, soft-spots and erosion gullies in gravel roads using selected material. It is intended for isolated repairs required between scheduled maintenance and localised repairs to very lightly trafficked road segments. The task is not suitable for the repair of corrugations or where the frequency of pot-holes is high.

The works shall be measured in cubic metres (m³) of selected material, accepted in place after compaction. Physical measurements of length, breadth and average thickness of the trimmed, excavated, hole shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 34.10 Grading Gravel
Roads:.....Km

The task comprises the mechanical grading of gravel roads and their shoulders to restore a smooth riding surface. It is trimming aimed at controlling surface roughness by removal of loose material and corrugations. The operation will not remove severe irregularities nor will it significantly restore camber. It does not involve mechanical compaction. Loose material is removed from the road surface and windrowed along the edge of the carriageway (in the dry season) or recovered across the road (in the wet season).

The works shall be measured in kilometres (km) of full width road graded. This shall include shoulders and side drains. Mitre drains shall be paid separately under their applicable Item 21.01. Physical measurements of length shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 34.11 Rehabilitating Gravel
Roads:.....Km

The works comprise ripping, scarifying, grading, reshaping, watering, mixing and compacting of the existing road formation of gravel roads, including reshaping the side ditches to the cross-section as determined by supervising engineer or as shown in the drawings where available. All soils used in reshaping the road section shall be free of organic or other unsuitable matter.

As there might be no designed profile grade for roadbeds in question, the elevation of the reshaped road surface will be determined by the Engineer according to the amount of material brought in from the adjoining side drains or road reserve and incorporated into the existing surface.

The works shall be measured in kilometres (km) of full width of road (side drains inclusive). Payment shall include all described works to the roadway inclusive of scarifying, watering and compaction. Mitre drains shall be paid separately under their applicable item 21.01. Physical measurements of road length shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, equipment, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 34.12 Localised Gravelling of Gravel Roads:.....Cubic Metre

The task comprises the supply and laying of specified selected road wearing course gravel to achieve a uniform layer thickness together with shaping, watering and compaction within localised areas on gravel roads.

The works are normally performed when the existing road pavement has developed insufficient thickness following several years of trafficking or has been eroded or otherwise damaged in a localised section.

Mechanical compaction and material watering for moisture control are mandatory. Any necessary improvements / repairs to the road drainage system should be carried out as a separate activity in advance of these regravelling operations.

The works shall be measured in cubic metres of selected road gravel measured in its finally compacted condition. Normal measurements shall be based on specified thickness, instructed width and measured length. Alternatively, if agreed with the Employer's Representative the quantity shall be taken as being 70% of the loose volume of delivered gravel surfacing material measured in the trucks. Full-load measurements must be agreed for each truck in advance of deliveries commencing and will normally be based on number of volumetrically checked shovel buckets. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials, compaction works and all incidentals necessary to complete the work as specified.

SERIES 4000 ASPHALT PAVEMENTS AND SEALS**SECTION 4100 PRIME COAT****PS 4102 MATERIALS****(a) Priming material**

✓ **Add the following:**

The prime coat shall either be MC 30 or MC 70 cut-back bitumen. The nominal rate of application for tender purposes shall be 0.7 litre/m².

SECTION 4300 MATERIALS AND GENERAL REQUIREMENTS FOR SEALS**PS 4303: Plant and Equipment****(a) General****Add the following:**

The Contractor shall ensure that he has a very good competent surfacing team, which is capable of delivering a high quality standard of workmanship; i.e. Competent and experienced Asphalt Foreman, operators and attendants, who have abilities of carrying out binder distribution and seal work operations within specified tolerance of applications and according to final product requirements.

The Engineer will instruct the removal of incompetent staff from site and a replacement thereof with a competent staff if satisfactory performance is not achieved and maintained.

(b) Binder distributor**Add the following:**

The binder distributor shall be capable of spraying the binder to the specified application rates and to the satisfaction of the Engineer. It is important that the pump of the distributor shall be capable of delivering the binder at the spray bar nozzles at the correct pressure to obtain the specified application rates, irrespective of the viscosity properties of the proposed binder. The spray bar of the distributor shall be fitted with fishplates at the outside edge of the bar to prevent over spraying onto shoulders or staining of concrete elements on the edge of the surfacing of the road. If instructed by the Engineer, the outside nozzles of the spray bar shall be turned to a 45° angle to achieve a thickened edge of binder along the outside limits of the seal area.

The variation in the rate of application between two adjoining 100 mm strips shall not exceed 5%, excluding the outside 300 mm on either side of the spray bar. The coefficient of the variation shall not exceed 10%. The test procedure shall be as prescribed in the Modified Tray-test contained in TRH 3 and shall be carried out each time the distributor is established on site or at least once per week. The binder distributor shall thus carry a set of troughs at all times in order to allow the execution of this test.

A calibration certificate, not older than 3 months, for the binder distributor shall be presented to the Engineer in order to ensure accurate application rates.

The binder distributor shall be fitted with a suitable valve or other access gate for taking of samples of the binder for testing purposes.

(c) Chip spreaders**Add the following at the end of the first paragraph:**

The chip spreader shall be capable of delivering a proper and uniform transverse distribution of chips across the width of the hopper. The chip distribution shall be tested by means of

canvas patches each 1.0 by 1.0m and placed side by side. The mass of chips spread into each individual canvas patch shall not deviate by more than 10% from the calculated average spread per canvas patch "

Add the following to the last paragraph:

A non-self propelled chip spreader may only be used in the event of a breakdown of the self-propelled chip spreader and shall be limited to the completion a distributor load. No further application of binder shall be permitted until such time as the self-propelled chip spreader is repaired or replaced.

At the end of the clause add the following paragraphs:

It is the Contractor's responsibility to incorporate, service and maintain all the necessary, adequate and sufficient equipment to carry out all his sealing operations. The Contractor may use the same bitumen distributor and heater described in Sub-Clauses 4103(a) and (d).

"The Engineer shall be entitled to instruct the removal, substitution or addition of equipment should there be any doubt as to the efficiency or capability of the equipment provided. No sealing work shall commence or continue if, in the opinion of the Engineer, all the required equipment is not on the site or in good operational condition."

PS 4304: GENERAL LIMITATION AND REQUIREMENTS

(a) Weather limitations

(i) Non-homogeneous Modified Binders (summer grade)

The minimum road surface temperature for applying bitumen-rubber binder shall be 25°C, and if below 25°C, the air temperature shall be at least 20°C and rising. As soon as the minimum air temperature at night is recorded to fall below 10°C, sealwork shall cease until warmer weather conditions are experienced.

Application of binders shall not be allowed if the existing cracks in the road contain moisture after rain.

(d) Preparation of areas to be sealed

(ii) Newly constructed seals

For the repair and filling of uneven spots in the completed base shallower than 12mm, a slurry complying with the requirements of clause 4604 (c) shall be used, based on one of the gradings of a Fine slurry.

60% stable mix-grade emulsion prepared from 70/80 penetration grade bitumen shall be used as binder.

The mix of fine aggregate, which shall be used for repairs shall comply with the following requirements by volume in the case of the irregularities exceeding 12mm in depth:

9.5mm nominal sized aggregate	1 part
6.7mm nominal sized aggregate	1 part
Fine -graded crusher sand	1 part

Each patch shall be compacted by means of two passes of a steel-wheeled roller of minimum mass of one comma five (1.5) tons, which compaction must be applied within four (4) hours after the emulsion has broken.

(iii) Existing Surfaces to be resealed

If so instructed the Contactor shall seal wide cracks by hand-application of Petrol seal. Payment will be made at daywork rates. Localised undulations shall be repaired as for base corrections, where and if so instructed, also on Dayworks rates.

Except at the intersections, the existing surfacing shall be cut back to a width of 7.4m with a roller cutting blade attached to a heavy self-propelled roller. The redundant surfacing strips shall be removed and edge break repairs shall be carried out before completion of the reconstruction of the shoulders, where such reconstruction is instructed.

Three (3) weeks prior to commencements of resealing operations an MSP 3 inverted emulsion rejuvenator shall be applied over the full width of the narrowed existing road seal, plus 100mm to 300mm wider along each side. The MSP 3 rejuvenator spray, shall be applied in half widths at an application rate of 0.5 l/m² during the summer months, before the start of the rains and the sprayed section kept closed to traffic for at least five (5) hours before re-opening.

PS 4305: HEATING AND STORAGE OF BITUMINOUS BINDERS

(b) Non- homogenous (heterogeneous) modified binders (summer grade)

Bitumen rubber binder shall not be stored at all. Once the rubber is added to the base bitumen, the product shall be applied to the road as soon as it is adequately digested and at spraying temperature. Any binder left in the distributor at the end of the allowable spraying period, or not applied due to an unforeseen stoppage lasting till beyond the spraying period, shall be removed from site. Even a forced stoppage in the blending period between addition of the rubber and heating to spraying temperature shall not be considered as a reason for the approval of storing the binder for later use. Reference shall be made to the specified limitations regarding the programme of work and lengths of construction areas described in section 1200 and 1500 of these specifications.

The Engineer's supervisory staff shall, through timeous notification by the Contractor, be afforded the opportunity to attend to all bitumen rubber blending operations in order to exercise control sampling and testing on the binder from the stage just prior to the addition of the rubber to the base bitumen up to the end of the allowable spraying period. Failure to conform to the requirements will be considered reason enough by the Engineer to reject the batch of binder.

PS 4310: Dust Control

Delete paragraph two.

SECTION 4900 TREATMENT OF SURFACE DEFECTS, PATCHING, REPAIRING EDGE BREAKS, CRACK SEALING

PS4911 MEASUREMENT AND PAYMENT

✓ **Change pay items 49.09 (a) and (b) as follows:**

The tendered rate for backfilling of excavations for patching shall be applicable to any damaged area irrespective of the size.

✓ **Add the following additional pay items:****PS 49.09 Backfilling of excavations for patching with:**

- (c) Gravel material.....Cubic
Metre

This task is normally performed in conjunction with bitumen surfacing repairs where the depth of potholes or other failure areas, extend significantly within lower unbound pavement layers. It is also used where the cause of surfacing failure is the deformation of the unbound layers or road foundation. Reconstruction of the unbound layers under this item is made using natural gravel base material compacted mechanically.

The works shall be measured in cubic metres (m³) of selected natural gravel base material after compaction. Physical measurements of length, width and average thickness shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above irrespective of the size of the damaged areas including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

- (d) Crushed Stone Aggregate.....Cubic
Metre

This task is normally performed in conjunction with bitumen surfacing repairs where the depth of potholes or other failure areas, extend significantly within lower unbound pavement layers. It is also used where the cause of surfacing failure is the deformation of the unbound layers or road foundation. Reconstruction of the unbound layers under this item is made using crushed stone aggregate compacted mechanically.

The works shall be measured in cubic metres (m³) of crushed stone aggregate after compaction. Physical measurements of length, width and average thickness shall be recorded. Unit rates shall include full compensation for all steps necessary to comply with the above irrespective of the size of the damaged areas including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified

**PS 49.16 Rip, scarify, water, mix and re-compact existing base.....Square
Metre**

- (a) 95% of modified AASHTO density (specify compaction thickness layer)...
- (b) 98% of modified AASHTO density (specify compaction thickness layer)

Work under this item involves ripping of existing surfacing that is heavily potholed. The old surfacing material shall be disposed of away from the site. The remaining surface shall be scarified, watered, mixed and compacted to the specified density.

Payment shall be made per square metre of surface compacted, and shall be compensation for cost of using grader, water bowser, and roller. Where top up gravel is required, this shall be paid under item PS 49.09(c).

**PS 49.17 Milling, water, mix and re-compact existing road pavement layers.....Square
Metre**

(a) 95% of modified AASHTO density (specify compaction thickness layer)

(b) 98% of modified AASHTO density (specify compaction thickness layer)

Work under this item involves milling of the existing road pavement layers to a depth of up to 200mm, watering, mixing, shaping to levels and compaction to the specified density. All the necessary preparations prior to the milling exercise such as cleaning and removal of debris, loose soil and deleterious material shall also form part of this work item.

Payment shall be made per square metre of surface milled, and shall be compensation for providing milling equipment, grader, water bowser and roller. Where top up gravel is required, this shall be paid under item PS 49.09(c).

PS 49.18 Pothole Repair:

(a) With stabilised base material:

The stabilizing agent to be used on this project, shall be cement or lime as instructed by the Engineer. Optimum quantities of stabilizing agent shall be determined by laboratory tests on site during construction.

(i) Base material stabilised with cementsquare metre

(ii) Base material stabilised with bituminous emulsionsquare metre

The works comprise the permanent repair of existing potholes in paved roads, using stabilised aggregate base materials. The works shall include cutting of the edges, excavation of loose material, priming of edges, placement and compaction of stabilised base materials up to a depth of 200mm in terms of base preparation where necessary.

The material shall comply with the following requirements specified for the various types of materials in the appropriate sections of the specifications.

The works shall be measured in square metres of completed repair of any thickness up to a depth of 200mm. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals necessary to complete the work as specified.

Where the repair shall be covered with a slurry seal, this shall be carried out and measured as a separate pay item.

(b) With cold mix asphalt material:

(i) 25 mm thickness.....square metre

(ii) 40 mm thickness.....square metre

The works comprise the repair of existing potholes in paved roads using cold mix asphalt material. The repair involves the proper cutting of the pothole edges, removal of failed material, preparation of the hole, application of tack / prime coat and cut back bitumen to the cut faces, placement and compaction of top-up base materials of existing pavement up to a depth of 200mm where necessary (except where crushed stone is instructed by the Engineer, payment shall be under item PS49.09(d)), handling, labour, materials and all incidentals necessary to complete the work as specified. Surfacing is made using cold premix asphalt

manufactured to recipe using a pug-mill or concrete mixer and mechanically compacted to achieve a smooth, even road surface.

The work for payment shall be measured in square metres. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, preparation of the patching area inclusive of top-up base materials up to 200mm depth (except where crushed stone is instructed by the Engineer, payment shall be under item PS49.09(d)), handling, labour, materials and all incidentals necessary to complete the work as specified.

(c) With plant mix hot asphalt:

- (i) 25 mm thickness.....square metre
- (ii) 40 mm thickness.....square metre

The work comprises the permanent repair of isolated potholes (up to 200mm in depth in terms of base preparation) that have formed in the surface of an asphalt or surface dressed pavement.

The repair involves the proper cutting of the pothole edges, removal of failed material, preparation of the hole, application of tack / prime coat and cut back bitumen to the cut faces, placement and compaction of top-up base materials of existing pavement up to a depth of 200mm where necessary. Surfacing is made using hot-mix asphalt produced at a central batching plant to an approved recipe.

Hot-mix Asphalt shall be a Continuously Graded (Medium) asphalt surfacing using 70/100 penetration grade bitumen and designed in accordance with the requirements of SATCC (Draft) Standard Specifications for Road and Bridge Works (2001) Clauses 4202 and 4203.

Prime coat to unbound bases shall be 60% stable grade anionic bitumen emulsion (diluted with up to 3 parts of water to 1 part emulsion, depending on the porosity of the base material).

Tack coat for joints shall be undiluted 60% stable grade anionic bitumen emulsion or heated penetration grade bitumen. Cut-back bitumen may be used with the prior consent of the Employer.

The work for payment shall be measured in square metres. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, preparation of the patching area inclusive of top-up base materials up to 200mm depth, handling, labour, materials and all incidentals necessary to complete the work as specified.

(d) With site mix asphalt:

- (i) 25 mm thickness.....square metre
- (ii) 40 mm thickness.....square metre

The work comprises the permanent repair of existing potholes in paved roads using site prepared hot mix asphalt produced to an approved recipe. The repair involves the proper cutting of the pothole edges, removal of failed material, preparation of the hole, application of tack / prime coat and cut back bitumen to the cut faces, placement and compaction of top-up base materials of existing pavement up to a depth of 200mm where necessary. This repair option should only be used where small work quantities are required or where central batching

plants are not available. To ensure the proper performance of the completed repair, the asphalt is required to be placed and compacted in accordance with the Specifications in Section 4200.

Site mixed Asphalt shall be a Continuously Graded (Medium) asphalt surfacing made using 70/100 penetration grade bitumen and designed in accordance with the requirements of SATCC (Draft) Standard Specifications for Road and Bridge Works (1998) Clauses 4202 and 4203. In certain situations the Employer may permit the use of standard recipe mix designs or alternative approved specifications, but only where sufficient test data and records of field performance confirm suitability.

Prime coat to unbound layers shall be 60% stable grade anionic bitumen emulsion (diluted with up to 3 parts of water to 1 part emulsion depending on the porosity of the base material). Tack coat for joints shall be undiluted 60% stable grade anionic bitumen emulsion, or heated penetration grade bitumen. Where required to the floor of potholes that do not extend below the existing asphalt, tack coat shall be diluted 2 parts of water to 1 part emulsion. Cut-back bitumen may be used with the prior consent of the Employer in which case small quantities may be prepared by blending kerosene and bitumen using strict fire precautions on site.

The work for payment shall be measured in square metres. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, preparation of the patching area inclusive of top-up base materials up to 200mm depth, handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 4912 SPEED CALMING MEASURES

PS 49.19 Rumble Strips

Rumble Strips as per standard drawing (Set of 5No. Across the road width: 150mm width x 15mm high at 500mm centre to centre)

PS 49.20 Speed Humps

Speed Humps as per standard drawing (9.5m long x 100mm high across the road width)

Add the following clause:

As part of speed calming measures, Rumble Strips and Speed Humps shall be constructed with the following specifications:

(a) Rumble Strips

Rumble Strips shall extend across the full width of the carriageway.

Tack coat for joints shall be undiluted 60% stable grade anionic bitumen emulsion or heated penetration grade bitumen. Cut-back bitumen may be used with the prior consent of the Employer.

Hot-mix Asphalt shall be a Continuously Graded (Medium) asphalt surfacing using 70/100 penetration grade bitumen and designed in accordance with the requirements of SATCC (Draft) Standard Specifications for Road and Bridge Works (2001) Clauses 4202 and 4203.

(a) Speed Hump/Raised Pedestrian Crossing

Tack coat for joints shall be undiluted 60% stable grade anionic bitumen emulsion or heated penetration grade bitumen. Cut-back bitumen may be used with the prior consent of the Employer.

Hot-mix Asphalt shall be a Continuously Graded (Medium) asphalt surfacing using 70/100 penetration grade bitumen and designed in accordance with the requirements of SATCC (Draft) Standard Specifications for Road and Bridge Works (2001) Clauses 4202 and 4203.

Refer to the standard drawing

PS 4912 MEASUREMENT AND PAYMENT

PS 49.19 Rumble Strips.....No

The work for payment shall be measured as number. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, preparation of the area inclusive of handling, labour, materials and all incidentals necessary to complete the work as specified.

PS 49.20 Speed Humps.....No

The work for payment shall be measured as number. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, preparation of the area inclusive of handling, labour, materials and all incidentals necessary to complete the work as specified.

5000 ANCILLARY ROAD WORKS

Add the following new section:

SECTION PS5050: BUS BAYS

PS 5051 Scope

Bus Bays will be located on site as instructed by the Engineer. Where Bus Bays are situated on opposite side of the road they shall be located such that the entry tapers follow each other and not the exit tapers that shall be remote from each other.

The Bus Bay shall be constructed as detailed in the drawings. The construction works shall include the following items:

- Gravel base on top of separately prepared sub base and earthworks
- Kerb stone type S1 including backing with concrete
- Concrete for bus bay 200 mm Class 20/19 with shrinkage joints and brushed surface finish
- Steel fabric reinforcement – size A252 in concrete
- Joints and sealant
- Finishes
- Drainage outlets through kerbs and verge
- Fill for side walk behind kerb stones

PS 5052 MEASUREMENT AND PAYMENT

Payment for Bus Bays item shall be made as comprising of all the activities mentioned under PS 5051 above, for the number of Bus Bays as instructed by the Engineer.

Excavation and fill below the sub base will be measured and paid under separate measured items.

The following pay items are applicable:

PS 50.01: Bus Bays: Construct Bus Bays as per typical bus bay drawing

(a)	Subbase 95% modified AASHTO in layers of 200mm.....	m ³
(b)	Base to 98% modified AASHTO in layers of 200mm.....	m ³
(c)	20/19 concrete pavement 200mm thick.....	m ³
(d)	Steel fabric reinforcement – type A252.....	kg
(e)	Kerb stone Type S1 including backing with concrete.....	m
(f)	Drainage outlet.....	No.

SECTION 5100 MARKER AND KILOMETRE POSTS**PS 5101 SCOPE****Add the following to this Clause:**

Road reserve demarcation beacons shall be constructed according to details on the drawings at an interval of 200m on either side of the road.

PS 5106 MEASUREMENT AND PAYMENT**✓ Add the following pay item:**

Item	Unit				
PS 51.03		Road	reserve	demarcation	beacons
.....		No.			

The unit of measurement shall be the number of beacons installed to the satisfaction of the Engineer

The tendered rate shall include full compensation for excavation, materials, reinforced concrete and backfilling of the beacon. Refer to standard drawing.

SECTION 5200: GUARDRAILS**PS 5202 MATERIALS****5202(b) Guardrail posts**

Add the following:

(iii) Concrete posts

Guardrail posts shall be of prefabricated concrete according to the detail on the drawings. Timber spacer blocks shall comply with specifications of Clause 5202.

PS 5203 CONSTRUCTION**5203(a) Erection**

Add the following to the 3rd paragraph:

The bolts shall be tack welded to the nuts in order to reduce the risk of vandalism.

PS 5206 MEASUREMENT AND PAYMENT

Add the following pay item:

Item	Unit
PS52.13 Galvanised and painted guardrails on concrete posts including	

end units and reflective posts
metre (m)

The unit of measurement shall be the metre of guardrail erected including end units.

The tendered rate shall include full compensation for furnishing all materials and labour and for erecting the galvanized guardrails painted as specified on the drawings or as directed by the Engineer, complete with prefabricated concrete posts, spacer blocks, bolts, nuts, washers and reinforcing plates, bull noses and for excavating and backfilling post holes with 15Mpa concrete and/or selected excavated material and removing surplus excavated material.

SECTION 5400 ROAD SIGNS

PS 5401 SCOPE

Add the following to this Clause:

This section also covers the repair of permanent road traffic signs. It includes the repair and replacement of faded, damaged or not clearly visible existing signboards and reference marker boards.

This section also covers the cleaning of existing permanent road signs which faces appear dirty, faded or non-reflective as well as the removal of illegal signs.

5406 ERECTING ROAD SIGNS

Change the heading of this Clause as follows:

PS 5406 ERECTING, REPAIRING AND CLEANING OF ROAD SIGNS

Add the following Sub-Clauses:

PS 5406 (h) – Repair Work

The Engineer may require that certain existing signs be dismantled for repair work or storage and later re-erected. The signs shall be repainted or repaired, by replacing the 200mm profiles or straightening the sheet metal, in accordance with the methods and requirements specified during the manufacturing process. New materials shall be used for part or all of the supporting structure. This work shall be done with as little damage as possible to the signs.

PS 5406 (i) – Cleaning of Road Signs

(i) Cleaning

The Engineer shall indicate which signs are to be cleaned.

Sign faces shall be cleaned using a non-abrasive cleaner with a pH of 6 to 8. Approved sign cleaning equipment such as the "Highway Handyman" cleaner shall be used.

All loose dirt and cleaners shall be washed from the sign. High pressure spray on the signs shall be avoided.

To reach the large overhead signs for cleaning, the Contractor shall use a truck with a hydraulic lift and shall take all necessary precautions not to damage the road surface when positioning the truck.

On instruction from the Engineer the Contractor shall remove dirt and graffiti from road sign faces.

(ii) Painting of metal road sign elements

Metal road sign supports and frames of sign faces which are showing a degree of corrosion, shall be repainted with the same type of paint used during the initial manufacturing of the sign elements. All corroded parts to be repainted shall first be properly cleaned using wire brushes, sanding paper, or other effective cleaning apparatus, to such an extent that no trace of rust can be observed all to the satisfaction of the Engineer.

Illegal signs: removal

Only on the instruction of the Engineer shall illegal signs be removed and disposed off or stored if required. Any inquiries from outside parties regarding the removal of illegal road signs shall be directed to the Engineer.

PS 5409 MEASUREMENT AND PAYMENT**Create the following new Pay Item:**

PS 54.10 Road	Signs
(Complete).....No.	

Measurement items 54.01, 54.02 and 54.03 are combined into one item PS54.10 and measurement shall be in terms of number of road signs installed and approved. A schedule of road signs to be installed will be provided on drawings detailing type, location for installation, dimensions, fixing and installation details, etc.

The road signs shall be of Class 1 – Engineering grade and lettering, symbols and border of retro-reflective material of High-intensity grade.

Under Item 54.10 the tendered rate shall also include the full compensation for provision and installation of the road signs (including excavation in soft material or rock, concrete backfill, road sign steel tubing supports, bolts and other accessories, welding, lettering etc.) according to drawings and specifications.

PS 54.11 Repair of Road Traffic Signs.....No.

The unit of measurement shall be the number of repaired road traffic signs.

The tendered rates shall include full compensation for dismantling of the damaged traffic sign and its support, repairing the road signboard and re-fixing it to the road sign support structure. The tendered rate shall also include the cost for all equipment, labour, supervision, nuts, bolts, transport, handling, *inter alia* necessary for the installation of the road signboard.

PS 54.12 Repair	of	Road	Sign
Supports.....No.			

The unit of measurement for erecting supporting structures manufactured from steel tubing shall be the number of repaired steel tubing used. Bolts and other accessories shall not be measured separately.

The tendered rates shall include full compensation for erecting the road sign supports, including all bolts, screws, rivets, welding and accessories, together with the painting and galvanising required and the provision and treatment of breakaway holes in timber supports.

The tendered rate shall include full compensation for all the labour, excavation, backfilling with soil or concrete, *inter alia*, as may be necessary for completing the work in accordance with the details shown on the drawings.

PS 54.13 Road Sign Cleaning:

- (a) Cleaning of guard-rail reflectors (all types).....No.
 (b) Cleaning of road signs boards from any dirt as well as from graffiti.....No.

The unit of measurement shall be the number of guard-rail reflectors and road signs cleaned. The tendered rates shall include full compensation for all labour, material and equipment necessary for cleaning the road signs from any dirt as well as from graffiti. It shall include for the provision and application of the specified cleaning detergent.

PS 54.14 Painting of metal road sign elements:

- (a) Road sign supports or frames
litre (l)
 (b) Road sign boards
litre (l)

The unit of measurement shall be the litre of road sign paint as per manufacturer's specifications.

The tendered rate shall include full compensation for the supply and application of one coat of the specified paint to sign supports and frames. The tendered rate shall also include for the cleaning and preparation of the elements, as specified, before the application of the paint.

PS 54.15 Removal of Illegal signs.....No.

The unit of measurement shall be the number of illegal road signs of any size removed on instruction of the Engineer.

The tendered rate shall include full compensation for all labour, equipment, transport and overheads necessary for removal of the illegal signs.

SECTION 5500 ROAD MARKINGS**PS5502 MATERIALS**

(ii) ***Add the following to (a) Paint (ii)Retro-reflective road marking paint:***

- ✓ Road marking paint shall comply with the requirements of SABS 731-1 for type 1 paint

During actual painting the Contractor must supply sealed samples of the paint to be used to the Engineer together with details of the paint batch numbers and testing carried out on these particular batches by the paint manufacturer to prove compliance with this specification. These samples shall be kept until the end of the Defects Liability Period.

PS 5507 APPLYING THE PAINT

✓ ***Delete the fifth paragraph of this Clause and replace with the following:***

Where painting is done by hand, it shall be applied in the number of layers to achieve the specified dry film thickness, and the subsequent layers after the first layer shall not be applied before the previous layer has dried. As most road marking paint reacts with the bitumen surface of the road, the paint shall be applied with one stroke only of the brush or roller.

✓ ***Delete the sixth paragraph of this Clause and replace with the following:***

Ordinary road marking paint shall be applied to achieve a minimum dry film thickness of 250µm without beads and 300µm with beads.

✓ ***Add the following to the last paragraph:***

After completion of a section of asphalt surfacing and before opening the section to traffic, the pre-marking of the centre and edge lines shall be done. At least ninety (90) days shall elapse after completion of the surfacing before the permanent road markings shall be applied, unless otherwise directed by the Engineer.

SECTION 5700 LANDSCAPING, TOPSOILING AND GRASSING

PS 5702: Materials

Add the following to the relevant sub-clauses:

(a) Fertiliser/Soil-Improvement Material

Fertilisers shall not be used in this Contract.

(b) Grass Cuttings

Grass cuttings shall be fresh cuttings of the species as specified by the Engineer

(c) Grass Seeds

The Contractor may use grass seeding in lieu of planting, but no additional payment shall be made for hand seeding or hydroseeding.

(d) Trees, Shrubs and Hedge Plants

This sub-clause is deleted.

(e) Grass Sods

Delete this sub-clause and replace it with the following:

Veld sods may be obtained from approved areas where a suitable type and density of grass are found. No additional payment shall be made for sods.

(f) Anti-Erosion Compounds

This sub-clause is deleted.

(g) Topsoil

Delete paragraphs two, three and four, and replace them with the following:

Topsoil shall be obtained from stripping operations under embankments and in cuttings in accordance with Sub-Clauses 1702(c) and 1703(a). Topsoil stripped from borrow areas shall not be used for topsoiling elsewhere but must be used to rehabilitate the borrow areas themselves. If the Contractor fails to conserve the topsoil as prescribed in Sub-Clause 1702(c) he shall obtain suitable topsoil from other sources at his own cost.

Care shall be taken to prevent the compaction of the topsoil in stockpiles or in the Works in any way, particularly by trucks driven over such material.

PS 5704: Preparing Areas for Grassing

(a) Soil Ripping

This sub-clause is deleted.

(b) Areas Which Do Not Require Topsoil

This sub-clause is deleted.

(c) Areas Which Require Topsoil

Add the following to this sub-clause:

All surfaces to be grassed shall immediately before grassing be roughened to ensure a proper bond with the topsoil. Topsoil free from stones shall be placed on the prepared surface and trimmed to a thickness slightly higher than the final thickness.

Where shown on the Drawings or directed by the Engineer the verges and the slopes of cuttings and embankments shall be covered with topsoil and lightly rolled to the required final thickness.

(d) Fertilising

This sub-clause is deleted.

PS 5705 Grassing

The Contractor shall choose the method of establishing grass. No additional payment shall be made regardless of the method of grassing employed by the Contractor.

Add the following to this sub-clause:

(a) Planting Grass Cuttings

Fresh grass cuttings of the "Kapinga" species or other approved species shall be planted by the Contractor at 250 mm centres and watered at frequent intervals to ensure the grass takes root and spreads out quickly. Grass cuttings that have been allowed to dry out shall not be planted.

Add the following to this sub-clause:

(c) Hydroseeding

The Engineer shall approve the types and mixtures of seeds to be used before the Contractor orders any seed. Hydroseeding shall be carried out with an approved hydroseeding machine at a rate of application of not less than 38 kg of seed mixture per hectare. A mulch shall be added to the hydroseeding mix at an approved rate.

(d) Topsoiling Only

This sub-clause is deleted.

Add the following to this sub-clause:

(e) Grassing With an Approved Grass Planter

Grassing shall be done with an approved grass planter which plants the seeds in rows spaced not more than 250 mm apart. The planter shall plant the seeds approximately 6 mm deep and shall lightly compact the topsoil.

(g) Other Methods

This sub-clause is deleted.

(h) The Grassing of Borrow Pits, Temporary Bypasses, Camp Sites, Access Roads and Stockpile Sites

This sub-clause is deleted.

PS 5706: Maintaining the Grass

(a) Watering, Weeding, Mowing and Replanting

On line one of paragraph two delete "mow" and replace with "cut".

(b) Acceptable Cover

At the beginning of this sub-clause add the following as first paragraph:

The Contractor shall be solely responsible for establishing an acceptable grass cover and for the cost of re-establishing grass by any method where no acceptable cover has been established.

(c) Defects Liability Period

The Defects Liability Period in respect of grass shall commence when an acceptable grass cover as defined in (b) above has been established and shall last one year or to the end of the period of the Contract, whichever expires later.

The Contractor shall be responsible for watering, cutting and maintenance of all grassed areas during the period of maintenance.

(d) Proprietary Brand Materials Used for Erosion Prevention

This sub-clause is deleted.

(e) Responsibility for Establishing an Acceptable Cover

This sub-clause is deleted. Sub-Clause 5706(b) applies.

(f) Re-Fertilising

This sub-clause is deleted.

PS 5709: Measurement and Payment

Add the following new pay items:

PS 57.03 (c) (i): Preparing the area for grassing, topsoil obtained from within the road reserve or borrow areas (unlimited free haul), layer thickness 75mm.....m²

SERIES 6000: STRUCTURES
Section 6100: Foundations for Structures

6115 Measurement and Payment

✓ *Change pay items 61.02 and 61.04 as follows:*

Item	Unit
PS 61.02 Excavation:	
(a) Excavation in any material other than rock at any depth	m ³
(b) Excavation in rock at any depth	m ³
PS 61.04 Backfill to Excavations:	
(a) utilizing imported material or material from excavation.....	m ³
(b) Soil cement	m ³

Section 6200: Falsework, Formwork and Concrete Finish

6210 Measurement and Payment

Change Pay Item 62.01 to read as follows:

PS 62.01 Formworksquare
metre

Formwork to all members, any face (horizontal, vertical or inclined) and for all classes of finish.

Amend the first paragraph after the first four Pay Items to read as follows:

The unit of measurement shall be the square metre and only the actual area of formwork in contact with the finished face shall be measured. No separate payment will be made for vertical, horizontal or inclined false work. The rate for formwork shall be for all classes of finish and to any direction.

Add the following new section:

SECTION PS 6900: REPAIR AND MAINTENANCE OF BRIDGES

PS 6900 Scope

The works comprise the inspection, removal of deteriorated wooden bridge deck members (beams, chasses and running boards), cleaning of the receiving structure and replacing with new members as required and fixing securely in place. In terms of payment, a differentiation is made between timber superstructure bridges, and Bailey Bridges due to the difference in fixings.

The works shall also cover the repair and maintenance of concrete decks parapets, deck slabs and beams.

PS 6901 Materials

(a) Wooden bridge decks

Timber chassis (cross-member) and running boards - (200 - 250 x 75mm) pine/equivalent soft wood or (200 - 250 x 50mm) hardwood,

Bulk-stripped Blue Gum or any other approved hardwood timber bearers (beams) - (300 – 450 mm dia. to match existing) or

Approved bulk-stripped softwood beams in special cases - (300 – 450 mm dia. to match existing),

Timber packing pieces (preferably hardwood),

150mm galvanised coach screws,

Preservative treatment chemicals.

(b) Concrete bridge decks

Concrete

Epoxy

Penetration grade bitumen

PS 6903 Execution of Works

(a) Wooden bridge decks

1. The bridge shall be stripped of rotten or otherwise faulty timbers as directed by the Employer's Representative. The exact extent of the work will be confirmed on site depending on the agreed condition of the exposed timber.
2. Faulty timbers shall be replaced with new timbers that generally have the same dimensions as the original, except as otherwise directed by the Employer.
3. Discarded timbers shall be disposed of by the Contractor in dumps approved by the Employer's Representative. On no account shall these be burned other than indirectly by logging and donation to local dwellers for cooking fuel, etc.
4. All deck timbers shall be square sawn, well seasoned, without warps or twists and free of jagged edges.
5. Main bearer beams shall be straight and without splits or cracks and be of uniform size.
6. All softwood shall first be given two coats of proprietary preservative paint applied strictly in accordance with the manufacturer's instructions. Any cuts that are subsequently made to the timber shall be similarly treated.
7. Chassis timbers (cross-members) shall be fitted with an air gap of not more than 50mm between adjacent planks to allow drainage and prevent dirt from becoming trapped. Where for reason of uneven beams the planks do not sit uniformly, they shall be packed using hardwood packing pieces cut to size. Packing pieces shall be a minimum of 300mm in length. High points on bearers may be locally removed by trimming.
8. All timbers shall be fixed using 150mm galvanised coach screws or nuts and bolts. Nails shall not be used unless otherwise approved due to their tendency to work loose. The screws shall be driven in a skewed and staggered manner.
9. In the case of Bailey Bridge redecking only proprietary galvanised steel fixings shall be permitted.
10. After renewing the deck chassis timbers, new running boards shall be fitted. These shall form a bridge valley (space between the two sets of running boards) of not more than 500mm or shall match the previous configuration. Each set of running surface shall have five planks or 1.1metres width, whichever is greater). All running boards shall be longer than 1.5m in length. Joints between parallel boards shall be staggered.
11. On completion of the works, the site shall be cleaned of all surplus materials and waste, and left in a clean, tidy condition.

(b) Concrete bridge decks

Concrete shall be transported and placed in a manner that will prevent segregation or loss of constituent materials or the contamination of the concrete.

Concrete shall not be placed in any part of the works until the Engineer's approval has been given. Placing and compacting the concrete shall at times be under the direct supervision of an experienced concrete supervisor. Concrete shall be fully compacted by vibrators or other approved means during and immediately after placing.

PS 6904 Measurement and Payment

PS 69.01 Removal of existing timber bridge decks.....metre

The unit of measurement shall be the metre of measured timber bridge deck length.
The tendered rate shall include the removal of timber running boards, chassis and beams of an existing timber deck bridge. The tendered rate shall also include the disposal of removed items away from site.

PS 69.02 Bailey bridge works (Specify Type of Bailey Bridge and Configuration) eg Standard, Mabey or Extra wide and Single Single, Tripple Single, Double Double etc

(a) De-launchingmetre

The unit of measurement shall be the metre of measured bailey bridge length.

The tendered rate shall include the de-launching of entire bridge including preparatory work, required de-launching gear, equipment and labourers.

(b) Re-launching.....metre

The unit of measurement shall be the metre of measured bailey bridge length.
The tendered rate shall include the re-launching of entire bridge including preparatory work, required launching gear, equipment and labourers.

(c) Transportation of bailey parts.....tonne-km

The unit of measurement shall be the tonne of bailey parts to be transported multiplied by the transport distance.

The tendered rate shall include the loading, transport and unloading of bailey parts as instructed by the Project Manager.

PS 69.03 Renew Bridge Timbers – Standard Chassis

(a) (200–250) mm x 75 mm Softwoodmetre

(b) (200–250) mm x 50 mm Hardwoodmetre

The works shall be measured in linear metres of each timber size installed and accepted on the bridge structure excluding all off-cuts and wasted pieces which shall not be measured. Payment shall include for the provision and application of the preservative and all metal fixings etc. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals inclusive of backfilling and compaction of approaches to running boards surface level necessary to complete the work as specified.

PS 69.04 Renew Bridge Timbers – Running Boards

- (a) (200–250) mm x 75 mm Softwoodmetre
- (b) (200–250) mm x 50 mm Hardwoodmetre

The works shall be measured in linear metres of each timber size installed and accepted on the bridge structure excluding all off-cuts and wasted pieces which shall not be measured. Payment shall include for the provision and application of the preservative and all metal fixings etc. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals inclusive of backfilling and compaction of approaches to running boards surface level necessary to complete the work as specified.

PS 69.05 Renew Bridge Timbers – Bailey Bridge Chassis

- (a) (200–250) mm x 75 mm Softwoodmetre
- (b) (200–250) mm x 50 mm Hardwoodmetre

The works shall be measured in linear metres of each timber size installed and accepted on the bridge structure excluding all off-cuts and wasted pieces which shall not be measured. Payment shall include for the provision and application of the preservative and all metal fixings etc. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals inclusive of backfilling and compaction of approaches to running boards surface level necessary to complete the work as specified.

PS 69.06 Renew Bridge Timbers – Bailey Bridge Running Boards

- (a) (200–250) mm x 75 mm Softwoodmetre
- (b) (200–250) mm x 50 mm Hardwoodmetre

The works shall be measured in linear metres of each timber size installed and accepted on the bridge structure excluding all off-cuts and wasted pieces which shall not be measured. Payment shall include for the provision and application of the preservative and all metal fixings etc. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals inclusive of backfilling and compaction of approaches to running boards surface level necessary to complete the work as specified.

PS 69.07 Renew Bridge Timbers – Bailey Bridge Kerbs/Ribbands/Edge beams.....metre

- (a) 150 mm x 150 mm Softwoodmetre
- (b) 150 mm x 150 mm Hardwoodmetre

The works shall be measured in linear metres of each timber size installed and accepted on the bridge structure excluding all off-cuts and wasted pieces which shall not be measured. Payment shall include for the provision and application of the preservative and all metal fixings etc. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals inclusive of backfilling and compaction of approaches to running boards surface level necessary to complete the work as specified.

PS 69.08 Renew Bridge Timbers – Bailey Bridge Ribband bolts (specify minimum size)-No

The unit of measurement shall be the number of bailey bridge ribband bolts.
The tendered rate shall include the supply of bolts and all accessories to site and installation of bailey bridge elements.

PS 69.09 Renew Bridge Timbers Beams/Bearers (300 – 450mm diameter).....metre

The works shall be measured in linear metres of each timber size installed and accepted on the bridge structure excluding all off-cuts and wasted pieces which shall not be measured. Payment shall include for the provision and application of the preservative and all metal fixings etc. Unit rates shall include full compensation for all steps necessary to comply with the above including all transport, handling, labour, materials and all incidentals inclusive of backfilling and compaction of approaches to running boards surface level necessary to complete the work as specified.

PS 69.10 Repair of deck parapets).....metre

This item includes the repair of damaged steel deck parapets on the sides of the bridge deck.

Work under this item shall be measured and paid for per linear metre repaired. The rate per metre shall be full compensation for the cost of materials, labour, transport and welding.

PS 69.11 Repairing reinforced concrete deck slabs and beams.....square metre

This item includes the repair of damaged deck slabs and beams of the bridge deck.

Work under this item shall be measured and paid for per square metre repaired. The rate per square metre shall be full compensation for the cost of materials, labour and transport.

PS 69.12 Sealing cracks on concrete decks.....metres

This item includes the sealing of cracked slabs and beams of the bridge deck.

Work under this item shall be measured and paid for per linear metre sealed. The rate per linear metre shall be full compensation for the cost of materials, labour and transport.

SECTION PS 7100: TESTING OF MATERIALS AND WORKMANSHIP

PS 7101 Scope

✓ Add the following to Clause 7101:

1. The Contractor shall be responsible for conducting such testing as may be required in order to indicate that proposed materials and mix designs comply fully with the requirements of the Specification. These tests shall be performed and submitted for checking, in advance of carrying out Works. The Contractor shall also carry out such further monitoring tests as may be required by the Specification during the performance of the Works.
2. Except where otherwise provided for in the Contract, the cost of testing shall be borne by the Contractor and shall be deemed to be included in his tendered rates for the work item.

Section 6D

Supplementary Information

Section 6D – Supplementary Information

The following forms shall be used in the administration of the contract

- (iv) Standard Works Order Format
- (v) Wages Record Form
- (vi) Dayworks Approval Form
- (vii) Project Sign Board
- (viii) Site Diary Form
- (ix) Labour Return Form
- (x) Contractors' Assessment Forms
- (xi) Environmental Monitoring Form
- (xii) Performance Assessment Form

ROADS AUTHORITY
ROUTINE TERM MAINTENANCE PROGRAMME
WORKS ORDER

Works Order No		Issued By	Name	Signature	(For Employer)
Contract No.		Date Received			
Date W.O. Prepared		Accepted By	Name	Signature	(For Contractor)

The Following Works are instructed pursuant to the Conditions of Contract and Specifications

Order	Item	Quantity	Unit Price	Total Price
1	(Description of Work)			

Location of Works	Region		Road No.	
	District		Start (km)	
			Finish (km)	

Commencement Date of Works		(if required to be stated)	
Period of Completion		(days following receipt of W.O.)	
Date Due for Completion		Extension if Granted	<input type="text"/> Days
Extended Date for Completion		(where applicable)	

Programme Required	<input type="checkbox"/>	Yes or No	Method Statement	<input type="checkbox"/>	Yes or No
Method of Valuation	<input type="checkbox"/>		BOQ or Dayworks		
Monthly Payments Permitted	<input type="checkbox"/>	Yes or No	(where specifically provided for)		
Provision for Liquidated Damages	<input type="checkbox"/>		MK per day		

Notified Date of Completion		Received on	
Take Over by Employer		Days Late	

Description of any Defects in Work

(Description of any Defects in Work)

Employer's estimate of defect rectification costs (withheld from payments)	
Final date set for rectification (pending permanent deduction of cost)	

Bill Item	Description	Unit	Estimated Quantity	Rate (MK)	Estimated Value (MK)	Actual Quantity	Actual Value (MK)

Total Measured Works	
Add 16.% of Measured Works as value Added Tax	
Total Works Order Value	
Liquidated Damages Deducted	
Defect Rectification Cost Deducted	
Settled Final Account Amount	

VALUATION CERTIFIED

For Contractor _____ Date _____

For Supervisor _____ Date _____

For Employer _____ Date _____



WAGES RECORD					
Contract Name:					
Contract No:				Contract Sum: MK	
Start Date:					
Contract Period:		Extention of Time:			
Revised Completion date:					
Contractors Name:					
Item	Labour Type			Duration Worked	Total Wages Paid (Mk)
	Class	Number Male	Number Female		
1	Management				
2	Head Office staff				
3	Site Agent				
4	Foreman				
5	Casual Labourers*				
6	Other Staff				
	Total				
Any Other Information on Labour issues on the Contract:					

* Please Attach list of casual labourers

Submitted By: Signed & Stamped:



DAYWORKS APPROVAL FORM - URGENT AND EMERGENCY WORKS

Date of Preparation:

Scope of Works:

Locality of the works:

Function:

Series 900 : Dayworks

Id	Plant	Unit	Quantities			Reason/Motivation for the variation
			Estimated	Executed	Variation	
901	D6 Dozer	Hour				
902	D4 Dozer	Hour				
903	Motor grader 125 - 150 HP	Hour				
904	Motor grader 160 - 200 HP	Hour				
905	Excavator 0.5 - 1.0 cum	Hour				
906	Front-end loader 1.5 - 2 cum	Hour				
907	Vibrating roller (self propelled) 8 - 12 tonnes	Hour				
908	Smooth wheeled roller 10 - 12 tonnes	Hour				
909	Pneumatic tyred roller 25 - 30 tonnes	Hour				
910	Pedestrian vibrating roller (0.75 - 2 tonnes)	Hour				
911	Plate compactor (vibratory)	Hour				
912	Water bowser with spray bar (truck mounted)	Hour				
913	Truck - flatbed lorry 5-10 tonne capacity	Hour				
914	Truck - tipper 6-12 tonne capacity	Hour				
915	Truck - tipper 15 tonne capacity	Hour				
916	Pick-up 4WD	Hour				
917	Water pump 75mm with hose	Hour				
918	Concrete Mixer 0.5 cum	Hour				
Labour						
919	Unskilled	Hour				
920	Ganger	Hour				
921	Tradesman	Hour				
Materials						
922a	Provisional Sum for Purchase of Materials - 7 Tonne Trips					
a1	Quarry Dust	Trips				
a2	Crusher run	Trips				
a3	Fine aggregate - Sand	Trips				
a4	Other (please specify)	Trips				
922b	Percentage addition to 922a a to cover profit, handling and all other costs	%				

Consultant

Prepared By

Signature

Date

Contractor

Accepted By

Signature

Date

Roads Authority

Approved By

Signature

Date

NB:

1. This form shall be filled in and approved before the contractor starts the works
2. The quantities herein are estimates (but should be strictly adhered to). The contractor should seek verbal approval before exceeding the quantities
3. Blank copies of this forms should be filled in on site during handovers of the sites

ROADS AUTHORITY MAINTENANCE										Date:	
DEPARTMENT CONTRACT SITE DIARY										Sheet No.	
FORM											
SITE DATA											
RA DIVISION				REGION				DISTRICT			
CONTRACT No.				CONTRACT TITLE:							
CONTRACTOR NAME:						CONSULTANT NAME:					
ROAD No.		SECTION No.			FROM:				TO:		
DAILY FORMATION											
Date				Day		Working Time		From:		To:	
WEATHER CONDITION				Rain	Yes	No	Working Condition		Poor	Fair	Good
MAINTENANCE ACTIVITIES											
	BOQ Item			Description				Location			
1											
2											
3											
RESOURCES ON SITE											
1	PERSONNEL			Site Ag	Site Eng	Foreman	Driver	Operator	Craftman	Unskilled	Total
	Number										
2	PLANT AND VEHICLE			Plant	Plant	Hvy Veh.	Veh.	Motorbike	Bicycle	Others	Total
	Number										
3	MATERIALS			Gravel		Crushed Stone		Aggregate		Cement	
	Quantity				cu.m		cu.m		cu.m		kg
	MATERIALS			Premix		Timber		Diesel		Petrol	
	Quantity				kg		cu.m		litre		litre
OTHER ACTIVITIES											
	Type			Location				Purposes			
1	Survey										
2	Setting - Out										
3	Sampling										
4	Testing										
5	Measurement										
6	Review Program										
7	review Cost										
8	Inspection										
9	Meeting										
10	Visitors										
11	Others										
REMARKS											
INSTRUCTIONS FOR FILLING IN THE FORM											
DAILY FILLING IN: Filled in by Contractor's Site Agent (In Triplicate Copies)											
WEEKLY DISTRIBUTION: Contractor Office - 1 copy, Consultant office - 1 copy and RA Regional Office - 1 copy											

LABOUR RETURN FORM

(1) By Project

	Description	Site Supervisory Staff (Site Agent/ foreman, Site clerk)		Skilled Labour (Carpenters, b/layers, steel fixers, Drivers etc)		General labourers		Total staff
		Male	Female	Male	Female	Male	Female	

(2) By District

This will be done for each quarter i.e. every 3 months. If there was nothing, please indicate "0" in the boxes

	District	Site Supervisory Staff (Site Agent/ foreman)		Skilled Labour (Carpenters, b/layers, steel fixers, Drivers etc)		General labourers		Total staff
		Male	Female	Male	Female	Male	Female	

Environmental and Social Management Plan Table

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
ENVIRONMENTAL MANAGEMENT					
Changes in hydrology impeded drainage	<ul style="list-style-type: none"> • Install drainage structure properly • Efficiency of drainage structures 	Design consultant Supervising Engineer Supervising Engineer	Contractor District Works Offices	Inspection (o) routine maintenance and road condition survey	(c) during construction and on completion of each structure
Soil erosion	<ul style="list-style-type: none"> • Control earthworks • Install drainage structures properly • Install erosion control measures • Landscape and re-vegetate gravel sites • Management of excavation activities • Impact on erosion (on road, off road, embankments, riverbanks, etc) • Efficiency of erosion control measures • Landscape and grass road embankment 	Supervising Engineer and Contractor Designer /RA District Works Offices RA	Supervising Engineer and Contractor	(c) inspection (o) routine maintenance and road condition survey (c) inspection (o) routine maintenance and road condition survey	(c) daily erosion control measures during construction and on completion of measures (o) once in 6 months (c) once a month
Air pollution	<ul style="list-style-type: none"> • Control speed of construction vehicles • Prohibit idling of vehicles • Sensitive workforce • Maintenance of plant and equipment as pollution screens • Plant trees in towns as pollution screens • Impose speed limits for all vehicles, especially at towns and villages • sensitize motorists/road users 	Supervising Engineer and Contractor Designer/ RA	TA \Health and Environment committees Traffic police	(c) inspection/ observation (o) observation	(c) Daily /random (o) random
Noise pollution	<ul style="list-style-type: none"> • Sensitize workforce • Supervise construction traffic • Sensitise drivers of construction vehicles • Maintain plant and equipment 	Supervising Engineer and Contractor	TA Health and environment Committees Traffic police	(c) inspection/ observation (o) observation	(a) Daily /random (o) random

Part 2: Section 6: Work Requirements

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> Impose speed limits for all vehicles, especially at towns and villages Sensitize motorists /road users 				
Water pollution	<ul style="list-style-type: none"> Incorporate erosion control measures Works on culverts to be done in the dry season Proper disposal of construction debris Proper handling, storage and disposal of oil and oil wastes Proper disposal of wastewater /sewerage at Contractor's workmen's camps 	Designer/ RA Supervising Engineer and Constructor	Contractor	(c) inspection	(c) daily
Oil pollution	<ul style="list-style-type: none"> Construct parking bays at larger trading centres for heavy vehicles. Proper storage, handling and disposal of oil and oil wastes Maintain plant and equipment Maintenance of construction vehicles should be carried out in the Contractor's camp 	Design Consultant Supervising Engineer and Contractor Supervising Engineer and Contractor	Contractor	(c) Inspection (o) routine maintenance	(c) during construction and on completion (o) once in 6 months (c) daily
Gravel sites	<ul style="list-style-type: none"> Inform people living at/near the sites that the pits have been selected for exploitation. Plan access to gravel sites Control and restrict access to gravel sites (e.g. by fencing) Control earthworks Proper management of excavation activities Landscape terrace if necessary, and grass site s. Replace trees that were removed during excavation Discourage pits being made into water 	Supervising engineer and Contractor Supervising Engineer and Contractor		(c) meeting (c) Inspection (c) Payment records (o) Inspection	(c) Once immediately after selection of sites (c) daily (o) once before excavation begins and at specified periods as agreed thereafter (c) once in 2 months (o) once in 6

Part 2: Section 6: Work Requirements

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	pans after construction	Contractor Supervising Engineer	District Works offices RA		months
	Rehabilitate old unused gravel pits <ul style="list-style-type: none"> Compensate individuals/ communities as required for use of material Progress of rehabilitated gravel sites (use of site, established vegetation) 				
Hard stone sources	<ul style="list-style-type: none"> Inform communities living at/near the sites that the sites have been selected for exploitation. Plan access to hard stone sites Control and restrict access to hard stone sites (e.g. by fencing) Control blasting Proper management of exploitation activities Landscape site after exploitation and grass sites. Replace trees or vegetation that were removed during excavation Compensate individuals / communities as required for use of material 	Supervising Engineer and Contractor Supervising Engineer and Contractor Contractor		(c) meeting (c) inspection (c) payments records	(c) Once immediately after selection of sites (c) daily (o) once before excavation begins and at specified periods as agreed thereafter
Sand sources	<ul style="list-style-type: none"> Take sand from beds of large rivers only Extraction to be done during low flow 	Supervising Engineer and Contractor	n/a	(c) inspection	(c) during mining
Water sources	<ul style="list-style-type: none"> Consult with communities during identification of sources Management of water usage 	Designer /RA	n/a	(c) meetings, inspection , check plans and schedule	c) during rains during abstraction at source and at random
Deviations	<ul style="list-style-type: none"> Plans deviations Adhere to road reserve if possible Obtain permission from 	Supervising Engineer and Contractor	Contractor	(c) check plans inspections	(o) daily when deviations are in use
	inhabitant/comm unity if deviation goes beyond road reserve				(c) once before constructing

Part 2: Section 6: Work Requirements

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> Re-instate deviations (and old tracks) to original condition Pay compensation for crops/property removed/destroyed by deviations Monitor rehabilitation of deviations 	Contractor	District Works Offices RA	(o) Payment records	deviations (o) Once in 6 months
Vegetation / flora / forests	<ul style="list-style-type: none"> Control clearing Prohibit clearing using herbicides Replant areas where vegetation is unnecessarily removed Landscaping and planting all disturbed areas (pits, deviations embankments, camp sites) Plant trees at main towns/ trading centres along road 	Supervising Engineer and Contractor TA Health and Environment Committees	Contractor	(c) inspection	(c) daily
	<ul style="list-style-type: none"> Planting and grassing should be done just before the rains Discourage use of firewood/charcoal by providing alternatives Care for tree/plants 		TA Health and Environment Committees	(c) observation (o) observation	(c) weekly (o) Random
Workmansh ip	<ul style="list-style-type: none"> locate camp in terminal town provide water supply provide proper sanitation facilities on site Provide proper solid waste disposal facilities Have central canteen facilities Discourage use of firewood/charcoal by providing alternatives Manage water use in camps 	Supervising Engineer and Contractor	Contractor	(c) inspection	(c) daily
Visual Enlargemen t	<ul style="list-style-type: none"> Landscaping and planting of deviations, gravel sites and camp Plant trees at terminal towns 	Designer /RA TA health and Environment committees	Contractor TA Health and	(c) inspection (c) observation (o) observation	(c) daily / random

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	and trading centres • Care for plants and trees		Environment Committees		(c) Weekly (o) random
Construction waste	• Proper disposal of construction wastes including oil, solid wastes and debris	Supervising Engineer and Contractor	Contractor	(c) inspection	(c) weekly
Demobilisation	• Clean up site • Remove all debris • Remove to original condition	Supervising Engineer and Contractor	Contractor	(c) inspection and certificate of completion	(c) on completion of road construction works
SOCIAL MITIGATION					
Settlement	• Plan for increased population and subsequent expansion of terminal towns and trading centres • Conduct STD/AIDS awareness campaign • Plan for local security	District Physical Planning Department Supervising Engineer TAs	District Physical Planning Department	(c) meetings, Barraza's (o) reports (c) inspection records (c) meetings, deployment of local police	(c) once during construction (o) annually (c) continuous (c) continuous (o) continuous
Loss of Land /property	• Identify project affected people • Notify people about non- compensation for annual crops within road reserve • Evaluate land/property loss due to deviations, materials sites and contractor's camp • Compensation to be paid for land and all property on land to temporally acquired for road construction works	RA Contractor	n/a	(c) inspection (c) notices, meetings (c) inspection (c) payments records	(c) Once before construction commences (c) compensation paid once after assessment of loss before construction
Loss of crops	• Limits clearing of crops as much as possible • Pay compensation for	RA Supervising Engineer and Contractor	Supervising Engineer and Contractor	(c) inspector (c) payment records	(c) Daily (c) Once after assessment of
	all crops outside road reserve that are removed/destroyed for clearing of carriage				loss before construction

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> way , gravel pits and deviations • Compensation to be paid for perennial crops within road reserve 	RA			
Employment	Recruit local people, of which at least 25% should be women	Contractor	n/a	(o) certificate of employment	(o) quarterly
Public Health and Occupational safety	<ul style="list-style-type: none"> • Reduce/minimize pollution as above • Provide water supply at camps • Proper disposal of solid and sanitary waste at camps • Design and locate pit latrines prudently • Have communal ablution facilities • Conduct STD/AIDS, awareness campaign and distribute condoms • Provide potable water for workforce • Provision of protective gear to workforce • First Aid Kit on site • Appoint Health Safety and Environment officer on site • Contractor should have workmen's compensation cover • Monitor impact on public health (incidence of malaria, respiratory diseases such as Covid-19, STDs HIV/AIDS) 	Supervising Engineer and Contractor	Contractor	(c) Inspection	(c) daily
		RA/Ministry of health	RA Ministry of Health	(o) Independent study	(o) once in 6 months
	<ul style="list-style-type: none"> • Conduct Covid-19 awareness campaign and provide prevention measures. 				
Disturbance to public	<ul style="list-style-type: none"> • Minimise pollution as above • Erect information and warning signs • Control construction activities 	Supervising Engineer	Contractor District Works Offices	(c) Inspection	(c)daily
		Supervising Engineer		(c) Inspection (c) Inspection	(c) when affected (c)daily (c)
		Supervising Engineer and		(c) Inspection (o) routines maintenance	

Part 2: Section 6: Work Requirements

Environmental Social Impact	Proposed Mitigation and Aspect for Monitoring	Responsibility for intervention and monitoring during design, construction and defects liability period	Responsibility for mitigation monitoring and/or maintenance after defects liability period	Monitoring means (c) = Construction (o) = operation	Recommended frequency of monitoring
	<ul style="list-style-type: none"> Construct special parking bay at terminal towns for trucks/heavy vehicles 	Contractor Design Consultant			during construction and on completion (o) once in 6 months
Road Safety	<ul style="list-style-type: none"> Install speed bumps near school and trading centres Supervise construction traffic Ensure safe access/egress to work sites Erect warning signs Construct shoulders which can be used by pedestrians and non motorized traffic Construct special parking bay at large trading centres for trucks/heavy vehicles Impact on road safety (number of accidents) 	Design Engineer Supervising Engineer and Contractor Design Consultant	Supervising Engineer and Contractor District Works Offices District Works offices RA	(o) (c) Inspection (c) Inspection (o) routines maintenance (c) Inspection (o) routine maintenance (o) Police report	(c)daily (c) when designed (o) once in 6 months
Socio-economic status	<ul style="list-style-type: none"> Changes in income level Change in health status 	n/a	RA	(o) Independent Study	(o) once in 5 years
	<ul style="list-style-type: none"> Changes in education levels. Changes in gender equality 				
Economic activity in project area	<ul style="list-style-type: none"> Changes in agricultural production and marketing Changes in livestock production and marketing 	n/a	District Agricultural Officers/RA	(o) Independent study	(o) once in 5 years

F. Environmental, Social, Health and Safety Requirements

[The Procuring and Disposing Entity shall use the services of suitably qualified environmental, social, health and safety specialists to prepare the specifications for ESHS. The Procuring and Disposing Entity shall attach or refer to its environmental, social, health and safety policies that will apply to the project.

If these are not available, it shall use the guidance in the User Guide in drafting an appropriate policy for the works]

ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY DECLARATION

We, _____ (Name of Bidder) bearing the company registration number _____, hereby:

1. PLEDGE THAT:

(a) We have read, understood, and will comply with:

- (i) the Environment Management legal framework or policies in conservation and management of the environment.
- (ii) all necessary and appropriate measures to protect and manage the environment
 - (i) all necessary and appropriate measures to conserve natural resources and to promote sustainable utilization of natural resources
 - (ii) all steps and measures necessary for ensuring that social safeguard issues including but not limited to gender, human rights, disability, Child Protection, HIV and AIDS are mainstreamed throughout all construction stages to minimize the negative impacts on the environment, social, health and safety matters

2. AGREE THAT:

- (a) In the event that our Bid is successful, we shall, within 15 days from the receipt of the Acceptance Letter comply with the requirements to produce the following environmental, social, health and safety plans as provided in Section 10:- Site Organisation Plan, Mobilisation and Construction Schedule Plan, Code of Conduct for Contractors Personnel Plan, ESHS Management Strategies and Implementation Plan.
- (b) Contract negotiations shall only commence if our plans comply with the Malawi standards on the protection and management of the environmental, social, health and safety matters.

Signed: **[insert signature of person whose name and capacity are shown]** In the capacity of **[insert legal capacity of person signing the Bid]**

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

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

Dated on _____ day of _____, _____ **[insert date of signing]**

G. Completion Schedule

H. Supplementary Information

Section 8. General Conditions of Contract

Section 8. General Conditions of Contract

A. General

1. Definitions

1.1 In these General Conditions of Contract, unless the context otherwise requires:

“Admeasurement Contract” means a contract based on a priced Bill of Quantities or schedule of unit price rates in which payment to the Contractor is subject to measurement of physical quantities of items by the Client.

“Adjudicator” is the person appointed jointly by the Client and the Contractor to resolve disputes in the first instance, as provided for in Clauses 27 and 28.

“Bill of Quantities” means the priced and completed Bill of Quantities forming part of the Bid for an Admeasurement contract.

“Compensation Events” are those defined in Clause 46.

“Completion Date” is the date of completion of the Works as certified by the Project Manager, in accordance with Clause 58.

“Contract” is an agreement between the Client and the Contractor to execute, complete, and maintain the Works consisting of documents listed in Clause 2.3 .

“Contract Price” is the price stated in the Notice of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

“Contractor” means the Supplier appointed under the Contract for the performance of the Works.

“Contractor’s Bid” is the completed Bid document submitted by the Contractor to the Procuring and Disposing Entity.

“Days” means calendar days;

“Dayworks” are varied work inputs subject to payment on a time basis for the Contractor’s employees and Equipment, in addition to payments for associated Materials and Plant.

“Defects Liability Certificate” is the certificate issued by Project Manager upon correction of defects by the Contractor.

"Defects Liability Period" is the period named in the Special Conditions of Contract and calculated from the Completion Date during which the contractor has an obligation to return to the site to correct any defects.

"Drawings" include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

"ESHS" means environmental, social (including sexual exploitation and abuse (SEA) and gender-based violence (GBV)), health and safety.

"Equipment" is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

"Initial Contract Price" is the Price listed in the Procuring and Disposing Entity's Notice of Acceptance.

"Intended Completion Date" is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Special Conditions of Contract.

"Materials" are all supplies, including consumables, used by the Contractor for incorporation in the Works.

"months" means calendar months.

"Performance Security" is any monetary surety required by the Client to guarantee performance by the Contractor under the Contract.

"Plant" is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

"Procuring and Disposing Entity" is the party named in the SCC which employs the Supplier to carry out the Works

"Project Manager" is the person named in the Special Conditions of Contract (or any other competent person appointed by the Client and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

"Site" is an area where the project is being implemented as defined in the Special Conditions of Contract.

"Site Investigation Reports" means the factual and interpretative reports about the surface and subsurface conditions at the Site.

"specification" means the Specification of the Works included in the Contract and any modification or addition made or approved by the Client.

"start date" means the latest date when the Contractor shall commence execution of the Works as provided in the SCC. It does not necessarily coincide with any of the Site Possession Dates.

"subcontractor" means a person or corporate body assigned to carry out part of the work in the Contract, which includes work on the Site.

"temporary Works" means works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

"variation" means an instruction given by the Client which varies the Works.

"works" are what the Contract requires the Contractor to construct, install, and turn over to the Client, as defined in the Special Conditions of Contract.

2. Interpretation

- 2.1 In interpreting these General Conditions of Contract, singular includes plural, male also means female or neuter, and the other way around.
- 2.2 Headings have no significance.
- 2.3 Words have their normal meaning under the language of the Contract unless specifically defined. The Client will provide instructions clarifying queries about these General Conditions of Contract.
- 2.4 If sectional completion is specified in the Special Conditions of Contract, references in the General Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.5 The documents forming the Contract shall be interpreted in the following order of priority:
 - (1) Agreement (signed by both parties),
 - (2) Minutes of Contract Negotiations,
 - (3) Notice of Acceptance,
 - (4) Bid Submission Sheet
 - (5) Special Conditions of Contract,
 - (6) General Conditions of Contract,
 - (7) Specifications,

- (8) Drawings,
- (9) Priced Bill of Quantities, and
- (10) Any other documents listed in the Special Conditions of Contract as forming part of the Contract

3. Corruption and Fraud

- 3.1 The Malawi Government requires that all Bidders comply with the legal framework on corrupt and fraudulent practices as outlined in Section 6 of the Bidding Document
- 3.2 In line with the existing Anti-Corruption law, and policy, and as provided in this clause, Bidders, including its agents, sub-contractors, sub-consultants, service providers, suppliers, and personnel are subject to the signed Anti-Corruption Declaration in Section 6, as part of the qualification criteria

4. Language and Law

- 4.1 The language of the Contract is English and the law governing the Contract is that of Republic of Malawi
- 4.2 Except where otherwise specifically stated and subject to any restrictions in the Special Conditions of Contract, the Project Manager will decide contractual matters between the Client and the Contractor in the role representing the Client.

5. Joint Venture, Consortium or Association

If the Supplier is a joint venture, consortium, or association, all the parties shall be jointly and severally liable to the Procuring and Disposing Entity for the fulfilment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association as specified in the SCC. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Procuring and Disposing Entity

6. Delegation

- 6.1 The Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.
- 6.2 Client's specific approval is required for actions detailed in the SCC

7. Communications

7.1 Any communications between parties that are referred to in these Conditions shall be made in writing.

7.2 A notice shall be effective only when it is delivered.

8. Subcontracting

8.1 The Contractor may subcontract with the approval of the Project Manager but may not assign the Contract without the written approval of the Client.

8.2 Subcontracting shall not alter the Contractor's obligations.

9. Other Suppliers

9.1 The Contractor shall cooperate and share the Site with other suppliers, contractors, public authorities, utilities, and the Client on the dates given in the Schedule of Other Suppliers. The Contractor shall also provide facilities and services for them as described in the Schedule.

9.2 The Client may modify the Schedule of Other Suppliers and shall notify the Contractor of any such modification.

10. Personnel

10.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel, referred to in the SCC, to carry out the functions stated in the Schedule or other personnel approved by the Project Manager.

10.2 The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Schedule.

10.3 The Project Manager may request the Contractor to remove a person who is a member of the Contractor's staff or work force and, state the reasons there.

10.4 The Contractor shall ensure that the person leaves the Site within seven (7) days and has no further connection with the work in the Contract.

11. Procuring and Disposing Entity's Risks

11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are the Client's risks:

- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to:

- (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works, or
 - (ii) negligence, breach of statutory duty, or interference with any legal right by the Client or by any person employed by or contracted to him except the Contractor.
- (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Client or in the Client's design, or due to war or radioactive contamination directly affecting the Republic of Malawi.

11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is a Client's risk except loss or damage due to

- (a) a Defect which existed on the Completion Date,
- (b) an event occurring before the Completion Date, which was not itself a Client's risk, or
- (c) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Client's risks are Contractor's risks.

13. Insurance

13.1 The Contractor shall provide, in the joint names of the Client and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the SCC for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant, and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- (d) personal injury or death.

13.2 The Contractor shall deliver policies and certificates for insurance to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

13.3 If the Contractor does not provide any of the policies and certificates required, the Client may effect the insurance which the Contractor should have provided and recover the premiums the Client has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.

13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

The Contractor, in preparing the Bid, may rely on any Site Investigation Reports referred to in the SCC, supplemented by any information available to the Bidder.

15. Queries about the Special Conditions of Contract

The Project Manager will clarify queries on the Special Conditions of Contract.

16. Contractor to Construct the Works

The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

17. Commencement and Completion Dates

The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Programme submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

18. Approval by the Project Manager

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for approval if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of the temporary works, where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent works, shall be subject to prior approval by the Project Manager before use.

19. Health and Safety

19.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel.

19.2 The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents.

19.3 The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Project Manager may reasonably require

20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Client.

20.2 The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

21. Possession of the Site

21.1 The Client shall formally give possession of all parts of the Site to the Contractor.

21.2 If possession of a part is not given by the date stated in the SCC, the Client will be deemed to have delayed the start of the relevant activities, and this will be a compensation event.

22. Access to the Site

The Contractor shall allow the Project Manager and any person authorised by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

23. Contractor's Equipment

- 23.1 The Contractor shall be responsible for all Contractor's Equipment.
- 23.2 When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works.
- 23.3 The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Project Manager.
- 23.4 The consent of the Project Manager shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

24. Protection of the Environment

- 24.1 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of its operations.
- 24.2 The Contractor shall ensure that emissions, surface discharges and effluent from
the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

25. Prohibition of Child Labour and other Harmful Labour Practices

- 25.1 The Contractor and its Subcontractor(s) shall not employ underage children in accordance with the labour laws and regulations applicable in Malawi and internationally.
- 25.2 A Contractor and its Subcontractor(s) shall ensure that they comply with all laws, regulations, policies, programs and interventions against gender inequality, sexual exploitation and abuse, as applicable in Malawi and internationally.

26. Instructions

The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.

27. Procedure for Disputes Resolution

- 27.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within fourteen (14) days of the notification of the Project Manager's decision
- 27.2 The Adjudicator shall give a decision in writing within twenty-eight (28) days of receipt of a notification of a dispute.
- 27.3 The Adjudicator shall be paid by the hour at the rate specified in the BDS and SCC, together with reimbursable expenses of the types specified in the SCC, and the cost shall be divided equally between the Client and the Contractor, whatever decision is reached by the Adjudicator.
- 27.4 Either party may refer a decision of the Adjudicator to an Arbitrator within twenty-eight (28) days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above twenty-eight (28) days, the Adjudicator's decision will be final and binding.
- 27.5 The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and, in the place, shown in the SCC.
- 27.6 Where the Adjudicator resigns or dies or should the Client and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Client and the Contractor.
- 27.7 In case of disagreement between the Client and the Contractor, within thirty (30) days, on the appointment of the Adjudicator under Clause 27.6, the Adjudicator shall be designated appointed by the Appointing Authority designated in the SCC at the request of either party, within fourteen (14) days of receipt of such request.

B. Time Control

28. Programme of Works

- 28.1 Within the time stated in the SCC, the Contractor shall submit to the Project Manager for approval a Revised Programme of Works showing the general methods, arrangements, order, and timing for all the activities in the Works.
- 28.2 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 28.3 The Contractor shall submit to the Project Manager for approval an updated Programme at intervals no longer than the period stated in the SCC. If the

Contractor does not submit an updated Programme within this period, the Project Manager may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

28.4 The Project Manager's approval of the Programme shall not alter the Contractor's obligations.

28.5 The Contractor may revise the Programme and submit it to the Project Manager again at any time.

28.6 A revised Programme shall show the effect of Variations and Compensation Events.

29. Extension of the Intended Completion Date

29.1 The Project Manager, with approval of the Client, shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.

29.2 The Project Manager, with approval of the Client, shall decide whether and by how much to extend the Intended Completion Date within twenty-one (21) days of the Contractor requesting the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

30. Acceleration

30.1 When the Client requires the Contractor to complete the work before the Intended Completion Date, the Project Manager will obtain priced proposals for achieving the necessary acceleration from the Contractor.

30.2 If the Client accepts these proposals, the Intended Completion Date will be adjusted accordingly and confirmed by both the Client and the Contractor.

30.3 If the Contractor's priced proposals for acceleration are accepted by the Client, proposals will be incorporated in the Contract Price and treated as a Variation.

31. Delays Ordered by the Project Manager

The Project Manager, with approval of the Client, may instruct the Contractor to delay the start or progress of any activity within the Works.

32. Management Meetings

- 32.1 Either the Project Manager or the Contractor may require the other to attend a management meeting to review the plans for remaining works and to deal with matters raised in accordance with the early warning procedure.
- 32.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Client. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

33. Early Warning

- 33.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of the Works.
- 33.2 The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date.
- 33.3 The Contractor as soon as reasonably possible and no later than the period specified in the SCC, shall provide the estimate.
- 33.4 Where the Contractor fails to give an early warning within such period as stated in the SCC, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment because of a Compensation Event and the Client shall be discharged from all Liability in connection with claims for extension of the Intended Completion Date and for a Compensation Event.
- 33.5 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

C. Quality Control

34. Identifying Defects

- 46.1.3 The Project Manager shall check the work of the contractor and notify the Contractor of any Defects found.
- 46.1.4 Such checking shall not affect the Contractor's responsibilities.

- 46.1.5 The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

35. Tests

If the Project Manager instructs the Contractor to carry out a test that is not specified under Clause 34 in the Specification to check whether any work has a Defect and the test shows a defect, that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

36. Correction of Defects

- 36.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period.
- 36.2 The Defects Liability Period shall be extended for as long as identified defects remain to be corrected.
- 36.3 Every time notice of a defect is given, the Contractor shall correct the notified Defect within the time specified by the Project Manager's notice.

37. Uncorrected Defects

- 37.1 If the Contractor has not corrected a defect within the time specified in clause 36 the Project Manager will assess the cost of having the Defect corrected, and the Contractor will be liable for this amount.
- 37.2 The amount in clause 37.1 will be deducted from current and future payment certificates or paid by the Contractor if insufficient funds are due under the contract.

D. Cost Control

38. Bill of Quantities or Activity Schedule

- 38.1 This Contract is:
- (a) An Admeasurement Contract with a Bill of Quantities, subject to Option 1; or
 - (b) A Lump Sum Contract with an Activity Schedule, subject to Option 2,
- as indicated in the SCC.

Option 1: Bill of Quantities for Admeasurement Contract

38.2 The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

38.3 The Bill of Quantities shall be used to calculate the Contract Price.

38.4 The Contractor shall be paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

Option 2: Activity Schedule for Lump Sum Contract

38.5 The Contractor shall provide updated Activity Schedules within fourteen (14) days of being instructed to by the Project Manager. The activities on the Activity Schedule shall be co-ordinated with the activities on the Programme.

38.6 The Contractor shall show delivery of Materials to the Site separately on the Activity Schedule if payment for Materials on Site shall be made separately.

39. Change in the Bill of Quantities or Activity Schedule

Option 1: Changes in the Bill of Quantities for Admeasurement Contracts

39.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than twenty-five (25) percent, provided the change exceeds one (1) percent of the Initial Contract Price, the Project Manager shall adjust the rate or price to allow for the change.

39.2 The Project Manager shall not adjust rates or prices from changes in quantities if the Initial Contract Price is exceeded by more than the percentage stated in the SCC, except with the prior approval of the Client.

39.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

39.4 **Option 2: Changes in the Activity Schedule for Lump Sum Contracts** The Project Manager shall request the Contractor to provide an updated Activity Schedule

39.5 The Activity Schedule shall be amended by the Contractor to accommodate changes of Programme or method of working made at the Contractor's own discretion.

39.6 Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

40. Variations

The contractor shall include all Variations in updated Programmes (or in the case of Lump Sum Contracts in updated Programmes and Activity Schedules) produced by the Contractor.

41. Payment for Variations

41.1 The Contractor shall provide the Project Manager with a quotation for carrying out a variation when requested to do so by the Project Manager.

41.2 The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

41.3 For Admeasurement Contracts only, if the work in the variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Clause 40.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates, which shall be lower, for the relevant items of work.

41.4 If the Contractor's quotation is unreasonable, the Project Manager may order the variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.

41.5 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

41.6 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

42. Cash Flow Forecasts

42.1 When the Programme (or in the case of Lump Sum Contracts the Programme or Activity Schedule) is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.

42.2 The cash flow forecast shall include different currencies, where applicable and as defined in the Contract, converted as necessary using the Contract exchange rates.

43. Payment Certificates

- 43.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed and materials on site less the cumulative amount certified previously.
- 43.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 43.3 The value of work executed and materials on site shall be determined by the Project Manager.
- 43.4 The value of work executed and materials on site shall comprise the value of:
- (a) the quantities of the items in the Bill of Quantities completed in the case of Admeasurement Contracts; or
 - (b) completed activities in the Activity Schedule in the case of Lump Sum Contracts.
- 43.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 43.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

44. Payments

- 44.1 Payments shall be adjusted for deductions for advance payments and retention.
- 44.2 The Client shall pay the Contractor the amounts certified by the Project Manager within forty-five (45) days of the date of each certificate.
- 44.3 If the Client makes a late payment, the Contractor shall be paid interest on the late payment in the next payment.
- 44.4 Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 44.5 If an amount certified is increased in a later certificate as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 44.6 Unless otherwise stated, all payments and deductions will be paid or charged in the proportions of currencies comprising the Contract Price.

44.7 Items of the Works for which no rate or price has been entered in will not be paid for by the Client and shall be deemed covered by other rates and prices in the Contract.

45. Compensation Events

45.1 The following shall be Compensation Events:

- (a) The Client does not give access to a part of the Site by the Site Possession Date stated in the Special Conditions of Contract.
- (b) The Client modifies the Schedule of Other Suppliers in a way that affects the work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Notice of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Client, or additional work required for safety or other reasons.
- (h) Other Suppliers, contractors, public authorities, utilities, or the Client does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The adverse effects on the Contractor of any of the Client's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion beyond a period of thirty (30) days; and
- (l) Other Compensation Events described in the SCC or determined by the Project Manager shall apply.

45.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased or the Intended Completion Date shall be extended. The Project Manager, with the approval of the Client, shall decide whether and by how much the Contract Price shall be increased and where determined necessary, the period of extension for the intended completion date.

45.3 The Project Manager shall submit information indicating or demonstrating the effort of each Compensation Event and the forecast on cost for the contractor.

45.4 The Project Manager shall assess the information submitted under clause 45.3 and the Contract Price shall be adjusted accordingly.

45.5 If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Contractor shall not be entitled to compensation to the extent that the Client's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

46. Taxes

46.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date twenty-eight (28) days before the submission of Bids for the Contract and the date of the last Completion certificate.

46.2 The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of Clause 50.

47. Currencies

Where payments are made in currencies other than Malawi Kwacha, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Bid Data Sheet.

48. Price Adjustment

48.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the SCC.

48.2 If so provided, the amounts certified in each payment certificate, after deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency.

48.3 A separate formula of the type indicated below applies to each Contract currency:

$$P_c = A_c + B_c I_{mc}/I_{oc}$$

where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c".

Ac and Bc are coefficients specified in the Special Conditions of Contract, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c"; and

Imc is the index prevailing at the end of the month being invoiced and Ioc is the index prevailing twenty-eight (28) days before Bid opening for inputs payable; both in the specific currency "c".

- 48.4 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected, and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

49. Retention

- 49.1 The Client shall retain from each payment due to the Contractor the proportion stated in the SCC until completion of the whole of the works.
- 49.2 On completion of the whole of the Works, half the total amount retained shall be repaid to the Contractor and the remaining half when the Defects Liability Period has passed, and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected.
- 49.3 With the approval of the Client, upon completion of the whole Works, the Contractor may substitute retention money with an "on demand" Bank guarantee.

50. Liquidated Damages

- 50.1 The Contractor shall pay liquidated damages to the Client at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date.
- 50.2 The total amount of liquidated damages shall not exceed the amount provided in the SCC.
- 50.3 The Client may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
- 50.4 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.

50.5 The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in Clause 45.1.

51. Bonus

The Contractor shall be paid a Bonus calculated at the rate per day stated in the SCC for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

52. Advance Payment

52.1 The Client shall make advance payment to the Contractor of the amounts stated in the SCC by the date stated in the SCC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Client in amounts and currencies equal to the advance payment.

52.2 The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor.

52.3 Interest shall not be charged on the advance payment.

52.4 The Contractor shall use the advance payment only to pay for Equipment, Plant, Materials, and mobilisation expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager. Any expenditure apart from these will be considered ineligible.

52.5 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

53. Securities

53.1 The contractor shall provide Performance Security to the Client within thirty (30) calendar days of receipt of the Notice of Acceptance in the amounts indicated in the SCC.

- 53.2 The contractor shall provide a Performance Security and an Environmental and Social, (ES) Performance Security for compliance with the Contractor's ESHS obligations for the due performance of the Contract.
- 53.3 The Performance Security and the ES Performance Security shall be in the amount specified in the SCC in the form of a Bank Guarantee in the format specified in the contract and in an amount specified in the Special Conditions of Contract and by a bank acceptable to the Client) and shall be denominated in the currency in which the Contract Price is payable.
- 53.4 The proceeds of the Performance Security and, if applicable, the ES Performance Security shall be payable to the Procuring and Disposing Entity as compensation for any loss resulting from the Contractor's failure to complete its obligations under the Contract.
- 53.5 The Performance Security and the ES Performance Security shall be in the form stipulated in Section 10 of the Bidding document.
- 53.6 The Performance Security and, if applicable, the ES Performance Security shall be provided to the Client no later than twenty-one (21) days after receipt of the Notice of Acceptance and shall be issued in the form of a Bank Guarantee in the format specified in the contract and in an amount specified in the Special Conditions of Contract and by a bank acceptable to the Client, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security (Bank Guarantee) shall be valid until a date twenty-eight (28) days from the date of issue of the Certificate of Completion.
- 53.7 An advance payment shall not be made unless and until the Contractor furnishes an advance payment guarantee covering the amount of the advance payment.

54. Dayworks

- 54.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 54.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two (2) days of the work being done.
- 54.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

55. Cost of Repairs

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Liability period shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Completion of the Contract

56. Completion

The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager will do so determining that the work is completed.

57. Taking Over

The Client shall take over the Site and the Works within seven (7) days of the Project Manager's issuing a Certificate of Completion.

58. Final Account

58.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period.

58.2 The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within sixty (60) days of receiving the Contractor's account if it is correct and complete.

58.3 If the Contractor's account is incorrect or incomplete, it is not, the Project Manager shall issue within sixty (60) days a schedule that states the scope of the corrections or additions that are necessary.

58.4 If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

59. Operating and Maintenance Manuals

59.1 If "as built" Drawings or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.

59.2 If the Contractor does not supply the Drawings or manuals by the dates stated in the SCC, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the SCC from payments due to the Contractor.

60. Termination

60.1 The Client or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

60.2 Fundamental breaches of Contract shall include the following:

- (a) the Contractor stops work for twenty-eight (28) days when no stoppage of work is shown on the current Programme and the stoppage has not been authorised by the Project Manager;
- (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within twenty-eight (28) days;
- (c) the Client or the Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) a payment certified by the Project Manager is not paid by the Client to the Contractor within ninety (90) days of the date of the Project Manager's certificate;
- (e) the Project Manager gives notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
- (f) the Contractor does not maintain a Security, which is required;
- (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the Special Conditions of Contract; and
- (h) if the Contractor, in the judgment of the Client has engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract.

60.3 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under Clause 59.2 , the Project Manager shall decide whether the breach is fundamental or not.

60.4 Notwithstanding the grounds listed in clause 60.2 , the Client may terminate the Contract for convenience.

60.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

61. Payment upon Termination

61.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the

work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the Client exceeds any payment due to the Contractor, the difference shall be a debt payable to the Client.

61.2 If the Contract is terminated for the Client's convenience or because of a fundamental breach of Contract by the Client, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

62. Property

All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Client if the Contract is terminated because of the Contractor's default.

63. Force Majeure

63.1 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Contractor that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Contractor. Such events may include, but not be limited to, acts of the Client in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

63.2 If a Force Majeure event or situation arises, the Contractor shall promptly notify the Client in writing of such condition and the cause thereof. Unless otherwise directed by the Client in writing, the Contractor shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

63.3 The Contractor shall not be liable for forfeiture of its performance security or retention monies held, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

64. Release from Performance

If the Contract is frustrated by an event of Force Majeure or by any other event entirely outside the control of either the Client or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

Section 9. Special Conditions of Contract

Section 9. 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 Reference	Special Conditions
GCC 1.1	<p>The Procuring and Disposing Entity is: Roads Authority</p> <p>The name and procurement reference number of the Contract is: RA/MAI/2025-26/T/BR/NR/MZ/38</p> <p>The Works are:</p> <p>The Site is: Construction of Lubeya Box Culvert Across Lubeya River Between Euthini and Chiseng'eze (M09) Road in Mzimba District and Procurement Reference Number and is defined in Drawings Nos.:NA</p> <p>The Start Date shall be: 14days after issuance of notice of acceptance</p> <p>The Intended Completion Date for the whole of the Works shall be: 120 days</p>
GCC 2.3	<p>The following documents form the Contract:</p> <p>For the purpose of representation, the priority of documents shall be in accordance with the following sequence:</p> <ul style="list-style-type: none"> (a) Agreement (b) Minutes of Contract Negotiations (c) Notice of Acceptance (d) the Letter of Bid (e) the Special Conditions of Contract (f) the General Conditions of Contract (g) the Particular Specifications (h) the Standard Specifications for Works (i) the Drawings and (j) the priced Bill of Quantities (k) the completed Qualification Information Forms and any other documents forming part of the Contract.
GCC 4.1	The language of the Contract is English and the law governing the Contract is Malawi Government
GCC 5	The leader of the JV or Consortium or Association is.....
GCC 6	<p>Delegation of the following duties will require Clients' approval</p> <p>(i) Clause 7: Subcontracting</p>

GCC Clause Reference	Special Conditions
	<p>(ii) Clauses 28: Extension of the intended Completion Date</p> <p>(iii) Clause 56: Taking Over</p> <p>(iv) Clauses 39 and 40: Variations</p> <p>(v) Clause 44 Compensation Events (Contractors Claim)</p> <p>Notwithstanding the obligation as set out above to obtain approval, if in the opinion of the Project Manager, an emergency occurs affecting the safety of life, or of the works or of adjoining property, the Project Manager may without relieving the Contractor of any of his duties and responsibilities under the Contract instruct the Contractor to execute all work or to do all things as may, in the opinion of the Project Manager be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of the approval of the Employer, with any such instruction of the Project Manager. The Project Manager shall determine an addition to the contract price in respect of such instruction if and as may be relevant and shall notify the Contractor accordingly, with a copy to the Employer.</p>
GCC 8	The Contractor shall not assign the contract without the approval of the Procuring and Disposing Entity
GCC 10.1	Key personnel as indicated in the Qualification Information Form (paragraph 1.5 of this Form) is part of the Contract
GCC 14.1	<p>The insurance cover and deductibles shall be:</p> <p>The minimum insurance cover and deductibles shall be:</p> <p>(a) The minimum cover for insurance of the works, plant and materials is: MWK 1 million (≤ 15 million contract amount); MWK 2.0 million (≥ 15 million contract amount); MWK 3.0 million (≥ 50 million contract amount); MWK 4.5.0 million (≥ 200 million contract amount); MWK 7.0 million (≥ 500 million contract amount); per occurrence with the number of occurrences unlimited.</p> <p>(b) The maximum deductible for insurance of the Works, Plant and Materials is: N/A</p> <p>(c) The minimum cover for insurance of equipment is MWK1.5 million (≤ 15 million contract amount); MWK 3.0 million (≥ 15 million contract amount); MWK 5.0 million (≥ 50 million contract amount); MWK 7.0 million (≥ 200 million contract amount); MWK 12.0 million (≥ 500 million contract amount); per occurrence with the number of occurrences unlimited.</p> <p>(d) The maximum deductible for insurance of equipment is: N/A</p> <p>(e) The minimum cover for insurance of property is MWK 1 million (≤ 15 million contract amount); MWK 1.5 million (≥ 15 million contract amount); MWK 3.0 million (≥ 50 million contract amount); MWK 4.5 million (≥ 200 million contract</p>

GCC Clause Reference	Special Conditions
	<p>amount); MWK 6.5.0 million (\geq 500 million contract amount);</p> <p>(f) The maximum deductible for insurance of property is: N/A The minimum cover for personal injury or death insurance is <u>MWK5 million</u> with no deductible.</p>
GCC 15	Site Investigation Report(s) Shall or shall not be part of the contract.
GCC 22	The Site Possession Date shall be: Start date
GCC 25.2	The ES Performance Security will be in the amounts of NA of the Contract Price and in the same currency(ies)
GCC 28.3	Fees and reimbursable expenses to be paid to the Adjudicator are To be agreed upon at time of appointment
GCC 28.4	<p>The institution whose arbitration procedures shall be used is: the National Construction Industry Council of Malawi (NCIC)</p> <p>Arbitration shall take place at: in Lilongwe – Malawi Engineering Institution</p>
GCC 28.5	The Appointing Authority for the Adjudicator is:
GCC 29.1	The Contractor shall submit a revised Programme for the Works within days of delivery of the Notice of Acceptance.
GCC 29.3	<p>The period between programme updates is:</p> <p>The amount to be withheld for late submission of an updated programme is% of current interim Payment Certificate amount</p>
GCC 37.1	The Defects Liability Period is: 12 Months
GCC 39.1	This contract is Admeasurement contract
GCC 46.1	The following shall also be Compensation Events: None
GCC 49.1	<p>The Contract subject to price adjustment and the following information regarding coefficients apply.</p> <p>The coefficients for adjustment of prices are:</p> <p>(a) For currency:</p> <p style="padding-left: 40px;">(i) percent nonadjustable element (coefficient A).</p> <p style="padding-left: 40px;">(ii) percent adjustable element (coefficient B).</p> <p>(b) For currency:</p> <p style="padding-left: 40px;">(i) percent nonadjustable element (coefficient A).</p>

GCC Clause Reference	Special Conditions								
	(ii) percent adjustable element (coefficient B).								
GCC 49.2	<p>The Index I for Malawi Kwacha will be:</p> <p>The Index I for the specified international currency will be:</p> <p>The Index I for currencies other than Malawi Kwacha and the specified international currency will be:</p>								
GCC 50.1	The proportion of payments retained is 10.% from each interim Payment Certificate and the maximum amount retained shall be 5% of the accepted Contract Price								
GCC 51.1	<p>The rate per day for liquidated damages is 0.1% % of the final Contract Price per day.</p> <p>The maximum amount of liquidated damages for the whole of the Works is 5 percent of the final Contract Price.</p>								
GCC 52	The Bonus for the whole of the Works is 0.1% of the final Contract Price per day. The maximum amount of Bonus for the whole of the Works is 5%% of the final Contract Price.								
GCC 53.1	The Advance Payment will be equivalent to 20% of the Contract Price and will be paid in the same currencies and proportions as the Contract Price. It will be paid to the Contractor no later than								
GCC 53.3	<p>The Advance Payment will be repaid by deducting equal amounts from payments due to the Contractor each month during the period starting 2nd months after the Start Date and ending.....months after the Start Date.</p> <table border="1"> <thead> <tr> <th>Work Percentage Completed</th><th>Payment</th></tr> </thead> <tbody> <tr> <td>20%</td><td>10%</td></tr> <tr> <td>50%</td><td>50%</td></tr> <tr> <td>80%</td><td>100%</td></tr> </tbody> </table>	Work Percentage Completed	Payment	20%	10%	50%	50%	80%	100%
Work Percentage Completed	Payment								
20%	10%								
50%	50%								
80%	100%								
GCC 54.1	The Performance Security in the amount of 10% of the Contract Price is required								
GCC 60.1	<p>The date by which operating, and maintenance manuals are required is:NA</p> <p>The date by which "as built" drawings are required is: end of the defects liability period, to be provided by the site supervising Consultant (Project Manager)</p>								
GCC 60.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is: 2%								

GCC Clause Reference	Special Conditions
GCC 62.1	The percentage to apply to the value of the work not completed upon termination, representing the Client's additional cost for completing the Works, is: 25%

Section 10. Contract Forms

Agreement

Procurement Reference No:

THIS AGREEMENT made the ... day of, ,20.., between of (hereinafter called "the Employer"), of the one part, and of (hereinafter called "the Contractor"), of the other part:

WHEREAS the Employer is desirous that the Contractor execute (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the sum of (hereinafter called the Contract Price).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) the General Conditions of Contract;
 - (b) the Special Conditions of Contract;
 - (c) the Schedule of Requirements;
 - (d) the Bid Submission Form and the priced Activity Schedule or priced Bill of Quantities submitted by the Contractor; and
 - (e) the Employer's Notification to the Contractor of award of contract;
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price 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.
5. The Contract Price or such other sum as may be payable shall be paid in Malawi Kwacha.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed in accordance with the law specified in the Special Conditions of Contract on the day, month and year indicated above.

for the Procuring and Disposing Entity

Namein the capacity of

Signature.....

WitnessSignature.....

For and on behalf of the Contractor

Name in the capacity of

Signature.....

WitnessSignature

Note for Bidders: The Performance 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.

Performance Security

(Bank Guarantee)

Performance Bank Guarantee (Unconditional)

Date: **[insert date]**

Procurement Reference No.: **[insert procurement reference number]**

To: **[name and address of Employer]**

WHEREAS **[name and address of Contractor]** (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. **[number]** dated **[date]** to execute **[name of Contract and brief description of Works]** (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE WE hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of **[amount of Guarantee] [amount in words]**, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of **[amount of Guarantee]** as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall be valid until a date twenty-eight (28) days from the date of issue of the Certificate of Completion.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

Signature and seal of the Guarantor:

Name of Financial Institution:

Address:

Date:

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

Advance Payment Security

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

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

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 Contractor]** (hereinafter called "the Contractor") 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 Contractor, 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 Contractor, 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 Contractor 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.

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 Bank]**

Dated on _____ day of _____, _____ **[insert date of signing]**

Site Organization and Method Plan

The Bidder shall:

- (a) provide a comprehensive Method Statement, with drawings where applicable, showing the methods proposed by the Bidder for carrying out the Works, including:
 - proposed location of main office on the site, workshops, stations (steel/concrete/asphalt structures), warehouses, laboratories, accommodation, etc. (sketches to be attached as required)
 - site organization
 - the method including the number of equipment, labour and materials to be used for carrying out each major category of Works
 - the logical sequence and correlation between the major categories of activities (Works)
 - traffic measures during the Works
- (b) provide details of the temporary and permanent Works to be constructed, taking into account the prevailing climatic conditions and the requirement to obtain various permits and approvals and that the existing system must remain functioning during construction.

As a minimum the Method Statement shall include the following

- 1) Location of Sites (e.g. site offices, stocks, warehouses)
- 2) Project Organisation (e.g. Project Management, Elaboration of Shop Drawings, Material Procurement)
- 3) Method for Removal of existing Surfaces and their Reinstatement
- 4) Method for Earthworks
- 5) Method for pipe installation
- 6) Method for Demolition Works, incl. separation into and handling of hazardous waste, residue and recyclable material
- 7) Method for Concrete Works
- 8) Method for Block Works
- 9) Method for Electrical Works
- 10) Health and Safety Plan
- 11) Environmental and Social Management Plan

Mobilization and Construction Schedule

The Contractor shall not carry out mobilization to Site unless the Engineer gives consent that appropriate measures are in place to address environmental and social risks and impacts, which as a minimum shall include applying the Management Strategies and Implementation Plans (MSIPs) and Code of Conduct for Contractor's Personnel, submitted as part of the Bid and agreed as part of the Contract.

1. **Attach a Graphic Work Schedule (critical milestone bar chart) for mobilisation, preparation of designs and drawings (Shop Drawings), ordering, manufacturing and delivery of equipment and material, construction, detailing the relevant activities, dates, allocation of labour and plant resources, etc. The planned input of the joint venture members and sub-Contractors shall be highlighted as well (in terms of activities undertaken, timing, etc.).**

ESHS Management Strategies and Implementation Plans

- (a) The Bidder shall submit comprehensive and concise Environmental, Social, Health and Safety Management Strategies and Implementation Plans (ESHS-MSIP) as required by ITB 38. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.
- (b) In developing these strategies and plans, the Bidder shall have regard to the ESHS provisions of the contract including those as may be more fully described in the following:
 - 1. ***[the Works Requirements described in Section 7];***
 - 2. ***[Environmental and Social Management Plan (ESMP)]***

Code of Conduct: Environmental, Social, Health and Safety (ESHS)

1. The Bidder shall submit the signed Code of Conduct that will apply to the Contractor's employees and subcontractors as required by ITB 38 of the Bid Data Sheet. The Code of Conduct shall ensure compliance with the ESHS provisions of the contract, including those as may be more fully described in the following:
 - (a) [the Works Requirements described in Section 7];*
 - (b) [Environmental and Social Management Plan (ESMP)];*
2. In addition, the Bidder shall submit an outline of how this Code of Conduct will be implemented. This will include: how it will be introduced into conditions of employment/engagement, what training will be provided, how it will be monitored and how the Contractor proposes to deal with any breaches.

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

Note to the Bidder: The minimum content of the Code of Conduct form as set out by the Client shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks. The Bidder shall initial and submit the Code of Conduct form in support of its Bid.

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Client] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation and assault and gender-based violence.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as “**Contractor’s Personnel**” and are subject to this Code of Conduct.

This Code of Conduct identifies the behaviour that we require from all Contractor’s Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behaviour will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favours, and other unwanted verbal or physical conduct of a sexual nature with other Contractor's or Client's Personnel;
7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed projects, sexual exploitation occurs when access to or benefit from Bank financed Goods, Works, Consulting or Non-consulting services is used to extract sexual gain;
8. not engage in Sexual Assault, which means sexual activity with another person who does not consent. It is a violation of bodily integrity and sexual autonomy and is broader than narrower conceptions of "rape", especially because (a) it may be committed by other means than force or violence, and (b) it does not necessarily entail penetration.
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Assault (SEA);
11. report violations of this Code of Conduct; and
12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the [Project Grievance [Redress] Mechanism].

RAISING CONCERNS

If any person observes behaviour that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these*]

- matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behaviour prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person with relevant experience in handling gender-based violence*] requesting an explanation.

Signed: [**insert signature of person whose name and capacity are shown**] In the capacity of [**insert legal capacity of person signing the Bid**]

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

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

Dated on _____ day of _____, _____ [**insert date of signing**]

**ATTACHMENT 1 TO THE CODE OF CONDUCT FORM
BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND
BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)**

The following non-exhaustive list is intended to illustrate types of prohibited behaviours:

(1) Examples of sexual exploitation and abuse include to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favour.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.