

# COUNTY GOVERNMENT OF MARSABIT



## STANDARD TENDER DOCUMENTS FOR PROCUREMENT OF ROAD WORKS

**FY 2018 – 2019**

### SPOT IMPROVEMENT WORKS OF LKALKUMBE TO GATAB ROAD

CONTRACT NO. **MBT/COU/ROADS/93/2018-2019**

- instructions to tenderers
- condition of contract
- special conditions
- drawings and bills of quantities
- standard forms

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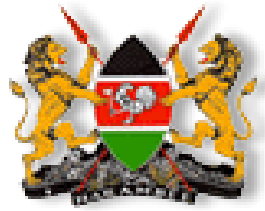
**Sign**.....

**CHIEF OFFICER.**  
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MARSABIT COUNTY.  
P.O. BOX 73-60500  
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**Sign**.....

DECEMBER, 2018.

**REPUBLIC OF KENYA**  
**COUNTY GOVERNMENT OF MARSABIT**  
**P. O. BOX 384-60500**  
**MARSABIT.**





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## **INTRODUCTION**

- 1.1 This standard tender document for procurement of works has been prepared for use by procuring entities in Kenya in the procurement of works (e.g. Buildings, Roads, Bridges, Repairs and Maintenance) which the procuring entity considers to be small and where it is not required to be open tendering.
- 1.2 The following guidelines should be observed when using the document:-
  - (a) Specific details should be furnished in the tender notice and in the special conditions of contract (where applicable).The tender document issued to renderers should not have blank spaces or options.
  - (b) The instructions to renderers and the General Conditions of Contract should remain unchanged. Any necessary amendments to these parts should be made through Appendix to instructions to Tenderers and special conditions of contract respectively.
- 1.3
  - (a) Information contained in the invitation to tender shall conform to the data and information in the tender documents to enable prospective renderers to decide whether or not to participate in the tender and shall indicate any important tender requirements
    - I. The invitation to tender shall be as an advertisement in accordance with the regulations or a letter of invitation addressed to renderers who have been prequalified following a request for prequalification.
- 1.4 The cover of the tender document should be modified to include:-
  - II. Tender number.
  - III. Tender name.
  - IV. Name of procuring entity.
  - V. Delete name and address of PPOA.

## **SECTION II - INSTRUCTIONS TO TENDERERS**

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## **SECTION II - INSTRUCTIONS TO TENDERERS**

2.1 The Employer as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The successful Tenderer will be expected to complete the Works by the Intended Completion Date specified in the said Appendix.

Tenderers shall include the following information and documents with their tenders, unless otherwise stated:

- (a) copies of certificates of registration, and principal place of business;
- (b) total monetary value of construction work performed for each of the last five years;
- (c) experience in works of a similar nature and size for each of the last five years, and clients who may be contacted for further information on these contracts;
- (d) major items of construction equipment owned;
- (e) qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) reports on the financial standing of the Tenderer, such as profit and loss statements and auditor's reports for the last five years;
- (g) authority to seek references from the Tenderer's bankers.

2.2 The Tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible or liable for those costs.

2.3 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Tenderer's own expense.

2.4 The procurement entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.

## **2.5 Cost of Tendering**

2.5.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the procuring entity, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

2.5.2 All firms found capable of performing the contract satisfactorily in accordance with the set prequalification criteria shall be prequalified.

## **2.4. The Tender Document**

2.4.1 The tender document comprises the documents listed below and addenda issued in accordance with clause 2.6 of these instructions to Tenderers

- (i) Invitation to Tender
- (ii) Instructions to tenderers
- (iii) General Conditions of Contract
- (iv) Special Conditions of Contract
- (v) Schedule of requirements
- (vi) Technical Specifications
- (vii) Tender Form and Price Schedules
- (viii) Tender Security Form
- (ix) Contract Form
- (x) Performance Security Form
- (xi) Bank Guarantee for Advance Payment Form
- (xii) Manufacturer's Authorization Form
- (xiii) Confidential Business Questionnaire

2.4.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderers risk and may result in the rejection of its tender.

## **2.5 Clarification of Documents**

2.5.1 A prospective tenderer requiring any clarification of the tender document may notify the Procuring entity in writing or by post at the entity's address indicated in the Invitation to Tender. The Procuring entity will respond in writing to any request for clarification of the



tender documents, which it receives not later than seven (7) days prior to the deadline for the submission of tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderers that have received the tender document.

2.5.2 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

## **2.6 Amendment of Documents**

2.6.1 At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.

2.6.2 All prospective candidates that have received the tender documents will be notified of the amendment in writing or by post and will be binding on them.

2.6.3 In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

## **2.7 Language of Tender**

2.7.1 The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchange by the tenderer and the Procuring entity, shall be written in English language, provided that any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

## **2.8 Documents Comprising of Tender**

2.8.1 The tender prepared by the tenderers shall comprise the following components

- (a) a Tender Form and a Price Schedule completed in accordance with paragraph 2.9, 2.10 and 2.11 below
- (b) documentary evidence established in accordance with paragraph 2.1 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- (c) documentary evidence established in accordance with paragraph 2.2 that the goods and ancillary services to be supplied by the tenderer are eligible goods and services and conform to the tender documents; and

- (d) tender security furnished in accordance with paragraph 2.14

## **2.9 Tender Forms**

- 2.9.1 The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the tender documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

## **2.10 Tender Prices**

- 2.10.1 The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the goods it proposes to supply under the contract
- 2.10.2 Prices indicated on the Price Schedule shall include all costs including taxes, insurances and delivery to the premises of the entity.
- 2.10.3 Prices quoted by the tenderer shall be fixed during the Tender's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 2.22
- 2.10.4 The validity period of the tender shall be 60 days from the date of opening of the tender.

## **2.11 Tender Currencies**

- 2.11.1 Prices shall be quoted in Kenya Shillings unless otherwise specified in the Appendix to Instructions to Tenderers.

## **2.12 Tenderers Eligibility and Qualifications**

- 2.12.1 Pursuant to paragraph 2.1, the tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and its qualifications to perform the contract if its tender is accepted.
  - 2.12.2 The documentary evidence of the tenderers eligibility to tender shall establish to the Procuring entity's satisfaction that the tenderer, at the time of submission of its tender, is from an eligible source country as defined under paragraph 2.1
  - 2.12.3 The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall be established to the Procuring entity's satisfaction;

- (a) that, in the case of a tenderer offering to supply goods under the contract which the tenderer did not manufacture or otherwise produce, the tenderer has been duly authorized by the goods' Manufacturer or producer to supply the goods.
- (b) that the tenderer has the financial, technical, and production capability necessary to perform the contract;
- (c) that, in the case of a tenderer not doing business within Kenya, the tenderer is or will be (if awarded the contract) represented by an Agent in Kenya equipped, and able to carry out the Tenderer's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.

## **2.13 Goods Eligibility and Conformity to Tender Documents**

2.13.1 Pursuant to paragraph 2.2 of this section, the tenderer shall furnish, as part of its tender documents establishing the eligibility and conformity to the tender documents of all goods which the tenderer proposes to supply under the contract

2.13.2 The documentary evidence of the eligibility of the goods shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.

2.13.3 The documentary evidence of conformity of the goods to the tender documents may be in the form of literature, drawings, and data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristic of the goods;
- (b) a list giving full particulars, including available source and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two (2) years, following commencement of the use of the goods by the Procuring entity; and
- (c) a clause-by-clause commentary on the Procuring entity's Technical Specifications demonstrating substantial responsiveness of the goods and service to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

2.13.4 For purposes of the documentary evidence to be furnished pursuant to paragraph 2.13.3(c) above, the tenderer shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procurement entity in its Technical Specifications, are intended to be descriptive only and not restrictive. The tenderer may substitute alternative standards, brand names, and/or catalogue numbers in its tender, provided that it demonstrates to the Procurement entity's satisfaction that the

substitutions ensure substantial equivalence to those designated in the Technical Specifications.

## **2.14 Tender Security**

**2.14.1** The tenderer shall furnish, as part of its tender, a tender security for the amount specified in the Appendix to Invitation to Tenderers.

2.14.2 The tender security shall be in the amount of **2%** per cent of the tender price.

2.14.3 The tender security is required to protect the Procuring entity against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 2.14.7

2.14.4 The tender security shall be denominated in Kenya Shillings or in another freely convertible currency, and shall be in the form of a bank guarantee issued by a reputable bank located in Kenya or a guarantee issued by a reputable insurance company accredited by Public Procurement Regulatory Authority in the form provided in the tender documents valid for thirty (30) days beyond the validity of the tender.

2.14.5 Any tender not secured in accordance with paragraph 2.14.1 and 2.14.3 will be rejected by the Procuring entity as non responsive, pursuant to paragraph 2.22

2.14.6 Unsuccessful Tenderer's tender security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.

2.14.7 The successful Tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 2.27 and furnishing the performance security, pursuant to paragraph 2.28

2.14.8 The tender security may be forfeited:

- (a) if a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
- (b) in the case of a successful tenderer, if the tenderer fails:
  - (i) to sign the contract in accordance with paragraph 2.27
  - or
  - (ii) to furnish performance security in accordance with paragraph 2.28

## **2.15 Validity of Tenders**

2.15.1 Tenders shall remain valid for 120 days or as specified in the Invitation to Tender after the date of tender opening prescribed by the Procuring entity, pursuant to paragraph 2.18. A tender valid for a shorter period shall be rejected by the Procuring entity as non responsive.

2.15.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 2.14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

## **2.16 Format and Signing of Tender**

2.16.1 The Procuring entity shall prepare two copies of the tender, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER," as appropriate. In the event of any discrepancy between them, the original shall govern.

2.16.2 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the tender. All pages of the tender, except for unamended printed literature, shall be initialed by the person or persons signing the tender.

2.16.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

## **2.17 Sealing and Marking of Tenders**

2.17.1 The Tenderer shall seal the original and each copy of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.

2.17.2 The inner and outer envelopes shall:

- (a) be addressed to the Procuring entity at the address given in the Invitation to Tender:

2.17.3 The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared "late".

2.17.4 If the outer envelope is not sealed and marked as required by paragraph 2.17.2, the Procuring entity will assume no responsibility for the tender's misplacement or premature opening.

## **2.18 Deadline for Submission of Tenders**

2.18.1 Tenders must be received by the Procuring entity at the address specified under paragraph 2.17.2 .

2.18.2 The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 2.6, in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will therefore be subject to the deadline as extended

## **2.19 Modification and Withdrawal of Tenders**

2.19.1 The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring Entity prior to the deadline prescribed for submission of tenders.

2.19.2 The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 2.17. A withdrawal notice may also be sent by cable, telex but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.

2.19.3 No tender may be modified after the deadline for submission of tenders.

2.19.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the expiration of the period of tender validity specified by the tenderer on the Tender Form. Withdrawal of a tender during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 2.14.7

2.19.5 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.

2.19.6 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

## **2.20 Opening of Tenders**

2.20.1 The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, on **a date** and in the location specified in the Invitation to Tender.

The tenderers' representatives who are present shall sign a register evidencing their attendance.

2.20.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts and the presence or absence of requisite tender security and such other details as the Procuring entity, at its discretion, may consider appropriate, will be announced at the opening.

2.20.3 The Procuring entity will prepare minutes of the tender opening.

## **2.21 Clarification of Tenders**

2.21.1 To assist in the examination, evaluation and comparison of tenders the Procuring entity may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.

2.21.2 Any effort by the tenderer to influence the Procuring entity in the Procuring entity's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers' tender.

## **2.22 Preliminary Examination**

2.22.1 The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.

2.22.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantify, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security forfeited. If there is a discrepancy between words and figures the amount in words will prevail

2.22.3 The Procuring entity may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or effect the relative ranking of any tenderer.

2.22.4 Prior to the detailed evaluation, pursuant to paragraph 2.23 the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one, which conforms to all the terms and conditions of the tender documents without material deviations. The Procuring entity's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.

2.22.5 If a tender is not substantially responsive, it will be rejected by the Procuring entity and may not subsequently be made responsive by the tenderer by correction of the non conformity.

### **2.23 Conversion to Single Currency**

2.23.1 Where other currencies are used, the procuring entity will convert these currencies to Kenya Shillings using the selling exchange rate on the date of tender closing provided by the Central Bank of Kenya.

### **2.24 Evaluation and Comparison of Tenders**

2.24.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 2.22

2.24.2 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.

2.24.3 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.

### **2.25 Preference**

2.25.1 Preference where allowed in the evaluation of tenders shall not exceed 30%

### **2.26 Contacting the Procuring entity**

2.26.1 Subject to paragraph 2.21 no tenderer shall contact the Procuring entity on any matter related to its tender, from the time of the tender opening to the time the contract is awarded.



2.26.2 Any effort by a tenderer to influence the Procuring entity in its decisions on tender, evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

## **2.27 Award of Contract**

### **(a) Post-qualification**

2.27.1 In the absence of pre-qualification, the Procuring entity will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.

2.27.2 The determination will take into account the tenderer financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 2.12.3 as well as such other information as the Procuring entity deems necessary and appropriate.

2.27.3 An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

### **(b) Award Criteria**

2.27.4 The Procuring entity will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

### **(c) Procuring entity's Right to Vary quantities**

2.27.5 The Procuring entity reserves the right at the time of contract award to increase or decrease the quantity of goods originally specified in the Schedule of requirements without any change in unit price or other terms and conditions

2.27.6

### **(d) Procuring entity's Right to accept or Reject Any or All Tenders**

2.27.7 The Procuring entity reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Procuring entity's action

## **2.28 Notification of Award**

2.28.1 Prior to the expiration of the period of tender validity, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.

2.28.2 The notification of award will constitute the formation of the Contract but will have to wait until the contract is finally signed by both parties

2.28.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 2.28, the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 2.14

## **2.29 Signing of Contract**

2.29.1 At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.

2.29.2 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.

2.29.3 Within thirty (30) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

## **2.30 Performance Security**

2.30.1 Within Thirty (30) days of the receipt of notification of award from the Procuring entity, the successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Procuring entity.

2.30.2 Failure of the successful tenderer to comply with the requirements of paragraph 2.27 or paragraph 2.28 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated Candidate or call for new tenders.

## **2.31 Corrupt or Fraudulent Practices**

2.31.1 The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts when used in the present regulations, the following terms are defined as follows;

- (i) "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and

- (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (prior to or after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the Procuring entity of the benefits of free and open competition;

2.31.2 The procuring entity will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

2.31.3 Further a tenderer who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public procurement in Kenya.

## **Appendix to Instructions to Tenderers**

### **Notes on the Appendix to the Instruction to Tenderers**

1. The Appendix to instructions to tenderers is intended to assist the procuring entity in providing specific information in relation to the corresponding clause in the instructions to Tenderers included in Section II and has to be prepared for each specific procurement
2. The procuring entity should specify in the appendix information and requirements specific to the circumstances of the procuring entity, the goods to be procured and the tender evaluation criteria that will apply to the tenders.
3. In preparing the Appendix the following aspects should be taken into consideration;
  - (a) The information that specifies and complements provisions of Section II to be incorporated
  - (b) Amendments and/or supplements if any, to provisions of Section II as necessitated by the circumstances of the goods to be procured to be also incorporated
4. Section II should remain unchanged and can only be amended through the Appendix.
5. Clauses to be included in this part must be consistent with the public procurement law and the regulations.

### Appendix to Instructions to Tenderers/General information

The following information regarding the particulars of the tender shall complement supplement or amend the provisions of the instructions to tenderers. Wherever there is a conflict between the provision of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers

INSTRUCTIONS TO TENDERERS REFERENCE	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
2.16.1	<i>The Bidder shall submit <b>ORIGINAL</b> and Two No. <b>COPIES</b> of the tender document, clearly marking each “<b>ORIGINAL TENDER</b>” and “<b>COPY OF TENDER</b>” on or before <b>Monday, 31<sup>st</sup> December , 2018 at 10:00am local time.</b> Both documents (Original &amp; Copy) shall bear all the attachments required.</i>
2.14.2	<i>The bidder shall submit a minimum <b>bid security of 2%</b> of the contract price from a reputable bank. Reserved categories (Women, Youth and PWD) will be exempted from the bid bond but must attach valid AGPO certificate.</i>
2.30.1	<i>Bidders shall submit a 10% performance security</i>

### QUALIFICATION FOR TENDERING

#### MANDATORY/PRELIMINARY REQUIREMENTS

The following **must** be submitted together with the Bid

S/n	REQUIRED DOCUMENTS	YE	NO
1	<b>Certified Copy of</b> Certificate of Registration/Incorporation		
2	Certificate of valid Tax compliance ( will be checked with KRA TCC)		
3	<b>Certified Copy of</b> Registration certificate with NCA 6 for Road works category		
4	<b>A Certified Copy</b> of RECENT CR 12 Form (12Months) from Registrar of company		
5	Valid <b>AGPO Certificate</b> (applicable to tenders reserved for Agpo)		
6	Valid business permit (Exempted for Agpo Tenders)		
7	Duly filled, signed and stamped form of power of attorney		
8	Bidders <b>should</b> serialize all pages of the documents submitted		

9	The bidder shall attach a duly filled, signed and stamped confidential business questionnaire by an individual entrusted with the powers of attorney.		
10	Duly filled, signed and stamped self declaration forms (r 62)		
11	The form of bid <b>shall</b> be duly filled, signed and stamped by an individual entrusted with the powers of attorney.		
12	The tender document shall be submitted complete, intact with no page alterations.		
13	Financial audited accounts for the previous <b>THREE</b> years endorsed, signed and stamped by a registered external auditor in order to confirm the following: ( <i>N/A for persons with AGPO certificates</i> )		
14	Properly Filled <b>Original</b> and <b>Copy</b> of <b>BQ</b>		
15	Bid Bond of 2%of Quoted Sum Per Project		

**Note:**

All submitted forms and documents shall be duly filled, signed (where applicable) and stamped.

Bidders shall attach copies of the under listed documents endorsed (signed and stamped) by commissioner of oaths/advocate registered in Kenya.

**Bidders that will not comply with the above criteria shall be considered non-responsive.**

**TECHNICAL EVALUATION CRITERIA TOTAL = 100 MARKS**

**1. TECHNICAL STAFFS 40 MARKS**

SN	DESCRIPTION OF REQUIREMENT	NUMBERS	QUALIFICATIONS	POINTS	ATTACHMENTS
<b>PERSONNEL</b>				<b>40</b>	
1	Site Engineer	1	Degree in civil engineer	20	
2	Road Inspector	1	Diploma in civil engineer	10	
4	Forman	1	Experience of 5years /diploma in civil engineering	5	
5	Site Agent	1	Experience of 3years	5	
<b>PLANTS &amp; EQUIPMENTS</b>				<b>30</b>	
1	Excavator	1	Attach proof of ownership or proof of lease agreement and contact of company's hired from.	5	
2	Grader	1		10	
3	roller	1		5	
4	Waterboozer	2		5	
5	Tippers	5		5	
<b>WORK EXPERIENCE</b>				<b>30</b>	
1	Proof of similar works done	5	Attach Local Service Order, Notification of award / Certificate of practical completion of a similar	20	

2	Past clientele		List and cell phone number of clientele	10	
<b>TOTAL TECHNICAL</b>				<b>100</b>	

### **TECHNICAL SCORE SHEET**

NO	CATEGORY	MAX MARKS	POINTS ACQUIRED
1.	PERSONELL	40	
2.	PLANTS & EQUIPMENTS	30	
3.	WORK EXPERIENCE	30	
<b>TOTAL</b>			

### **Minimum Passmark to proceed to financial evaluation -70%**

#### **SECTION III – CONDITIONS OF CONTRACT**

#### **1. Definitions**

1.1 In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated;

“Bills of Quantities “means the priced and completed Bill of Quantities forming part of the tender [where applicable].

“Schedule of Rates” means the priced Schedule of Rates forming part of the tender [where applicable].

“The Completion Date “means the date of completion of the Works as certified by the Employer’s Representative.

“The Contract “means the agreement entered into by the Employer and the Contractor as recorded in the Agreement Form and signed by the parties.

“The Contractor “refers to the person or corporate body whose tender to carry out the Works has been accepted by the Employer.

“The Contractor’s Tender “is the completed tendering document submitted by the Contractor to the Employer.

“The Contract Price” is the price stated in the Letter of Acceptance.

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

“A Defect” is any part of the Works not completed in accordance with

heContract.

“The Defects Liability Certificate” is the certificate issued by Employer’s Representative upon correction of defects by the Contractor.

“The Defects Liability Period” is the period named in the Appendix to Conditions of Contract and calculated from the Completion Date.

“Drawings “include calculations and other information provided or approved by the Employer’s Representative for the execution of the Contract.

“Employer “Includes Central or Local Government administration, Universities, Public Institutions and Corporations and is the party who employs the Contractor to carry out the Works.

“Equipment “is the Contractor’s machinery and vehicles brought temporarily to the Site for the execution of the Works.

“Site “means the place or places where the permanent Works are to be carried out including workshops where the same is being prepared.

“Materials “are all supplies, including consumables, used by the Contractor for incorporation in the Works.

“Employer’s Representative” is the person appointed by the Employer and notified to the Contractor for the purpose of supervision of the Works.

“Specification “means the Specification of the Works included in the Contract.

“Start Date “is the date when the Contractor shall commence execution of the Works.

“A Subcontractor “is a person or corporate body who has a Contract with the Contractor to carry out a part of the Work in the Contract, which includes Work on the Site.

“Temporary works “are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

“A Variation “is an instruction given by the Employer’s Representative which varies the Works.

“The Works “are what the Contract requires the Contractor to construct, install, and turn over to the Employer.



## 2. Contract Documents

2.1 The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;

- (1) Agreement,
- (2) Letter of Acceptance,
- (3) Contractor's Tender,
- (4) Conditions of Contract,
- (5) Specifications,
- (6) Drawings,
- (7) Bills of Quantities or Schedule of Rates [whichever is applicable)

## 3. Employer's Representative's Decisions

3.1 Except where otherwise specifically stated, the Employer's Representative will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

## 4. Works, Language and Law of Contract

4.1 The Contractor shall construct and install the Works in accordance with the Contract documents. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Contractor, as up dated with the approval of the Employer's Representative, and complete them by the Intended Completion Date.

4.2 The ruling language of the Contract shall be English language and the law governing the Contract shall be the law of the Republic of Kenya.

## 5. Safety, Temporary works and Discoveries

5.1 The Contractor shall be responsible for design of temporary works and shall obtain approval of third parties to the design of the temporary works where required.

5.2 The Contractor shall be responsible for the safety of all activities on the Site.

5.3 Anything of historical or other interest or significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Employer's Representative of such discoveries and carry out the Employer's Representative's instructions for dealing with them.

## 6 Work Program and Sub-contracting

- 6.1 Within seven days after Site possession date, the Contractor shall submit to the Employer's Representative for approval a program showing the general methods, arrangements, order and timing for all the activities in the Works.
- 6.2 The Contractor may sub- contract the Works (but only to a maximum of 25 percent of the Contract Price) with the approval of the Employer's Representative. However, he shall not assign the Contract without the approval of the Employer in writing. Sub-contracting shall not alter the Contractor's obligations.

## 7 The site

- 7.1 The Employer shall give possession of all parts of the Site to the Contractor. The Contractor shall allow the Employer's Representative and any other person authorized by the Employer's Representative, 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.

## 8 Instructions

- 8.1 The Contractor shall carryout all instructions of the Employer's Representative which are in accordance with the Contract.

## 9 Extension of Completion Date

- 9.1 The Employer's Representative shall extend the Completion Date if an occurrence arises which makes it impossible for completion to be achieved by the Intended Completion Date. The Employer's Representative shall decide whether and by how much to extend the Completion Date.
- 9.2 For the purposes of this clause, the following occurrences shall be valid for consideration;

Delay by:-

- (a) Force majeure, or
- (b) Reason of any exceptionally adverse weather conditions, or
- (c) Reason of civil commotion, strike or lockout affecting any off the trades employed upon the Works or any of the trades engaged in the preparation ,manufacture or transportation of any of the goods or materials required for the Works ,or
- (d) Reason of the Employer's Representative's instructions

issued under these Conditions, or

- (e) Reason of the contractor not having received in due time necessary instructions, drawings, details or levels from the Employer's Representative for which he specifically applied in writing on a date which having regard to the date for Completion stated in the appendix to these Conditions or to any extension of time then fixed under this clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, or
- (f) Delay on the part of artists ,tradesmen or others engaged by the employer in executing work not forming part of this Contract, or
- (g) reasonofdelaybystatutoryorotherservicesprovidersorsimilarbodiesengageddirectlybytheEmployer,or
- (h) reason of opening up for inspection of any Work covered up or of the testing or any of the Work, materials or goods in accordance with these conditions unless the inspection or test showed that the Work, materials or goods were not in accordance with this Contract, or
- (i) reason of delay in appointing a replacement Employer's Representative, or
- (j) reason of delay caused by the late supply of goods or materials or in executing Work for which the Employer or his agents are contractually obliged to supply or to execute as the case maybe, or
- (k) delay in receiving possession of or access to the Site.

## 10 Management Meetings

10.1 A Contract management meeting shall be held regularly and attended by the Employer's Representative and the Contractor.

10.2 the Employer. The responsibility of the parties for actions to be taken shall be decided by the Employer's Representative either at the management meeting or after the management meeting and stated in writing to all who attend the meeting.

Its business sha

10.3 Communication between parties shall be effective only when in writing.

## 11 Defects

- 11.1 The Employer's Representative shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor's responsibilities. The Employer's Representative may instruct the Contractor to search for a defect and to uncover and test any Work that the Employer's Representative considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor. However if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.
- 11.2 The Employer's Representative shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract.
- 11.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Employer's Representative's notice. If the Contractor has not corrected a defect within the time specified in the Employer's Representative's notice, the Employer's Representative will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

## 12 Bills of Quantities/Schedule of Rates

- 12.1 The Bills of Quantities /Schedule of Rates shall contain items for the construction, installation, testing and commissioning of the Work to be done by the Contractor. The contractor will be paid for the quantity of the Work done at the rates in the Bills of Quantities /Schedule of Rates for each item. Items against which no rate is entered by the Tenderer will not be paid for when executed and shall be deemed covered by the rates for other items in the Bills of Quantities/ Schedule of Rates.
- 12.2 Where Bills of Quantities do not form part of the Contract, the Contract Price shall be a lump sum (which shall be deemed to have been based on the rates in the Schedule of Rates forming part of the tender) and shall be subject to re-measurement after each stage.

## 13 Variations

- 13.1 The Contractor shall provide the Employer's Representative with a quotation for carrying out the variations when requested to do so. The Employer's Representative shall assess the quotation and shall obtain the necessary authority from the Employer before the variation is ordered.

13.2 If the Work in the variation corresponds with an item description in the Bill of Quantities/ Schedule of Rates, the rate in the Bill of Quantities/ Schedule of Rates shall be used to calculate the value of the variation. If the nature of the Work in the variation does not correspond with items in the Bill of Quantities/Schedule of Rates, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.

13.3 If the Contractor's quotation is unreasonable, the Employer's Representative may order the variation and make a change to the Contract Price, which shall be based on the Employer's Representative's own forecast of the effects of the variation on the Contractor's costs.

#### 13.4 Payment Certificates and Final Account

13.5 The Contractor shall be paid after each of the following stages of Work listed here below (subject to re-measurement by the Employer's Representative of the Work done in each stage before payment is made).

13.6 In case of lump-sum Contracts, the valuation for each stage shall be based on the quantities so obtained in there-measurement and the rates in the Schedule of Rates.

(i) Advance payment (*percent of Contract Price, [after Contract execution ]to be inserted by the Employer*).

(ii) First stage (*define stage*)

(iii) Second stage (*define stage*)

(iv) Third stage (*define stage*)

(v) After defects liability period.

13.7 Upon deciding that Works included in a particular stage are complete ,the Contractor shall submit to the Employer's Representative his application for payment. The Employer's Representative shall check, adjust if necessary and certify the amount to be paid to the Contractor within 21 days of receipt of the Contractor's application. The Employer shall pay the Contractor the amounts so certified within 30 days of the date of issue of each Interim Certificate.

13.8 The Contractor shall supply the Employer's Representative with a detailed final account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer's Representative shall issue a Defect Liability Certificate and

certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer's Representative shall issue within 21 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Employer's Representative shall decide on the amount payable to the Contractor and issue a Final Payment Certificate. The Employer shall pay the Contractor the amount so certified within 60 days of the issue of the Final Payment Certificate.

- 13.9 If the period laid down for payment to the Contractor upon each of the Employer's Representative's Certificate by the Employer has been exceeded, the Contractor shall be entitled to claim simple interest calculated proration the basis of the number of days delayed at the Central Bank of Kenya's average base lending rate prevailing on the first day the payment becomes overdue. The Contractor will be required to notify the Employer within 15days of receipt of delayed payments of his intentions to claim interest.

## 15. Insurance

- 15.1 The Contractor shall be responsible for and shall take out appropriate cover against, among other risks, personal injury; loss of or damage to the Works, materials and plant; and loss of or damage to property.

## 16. Liquidated Damages

- 16.1 The Contractor shall pay liquidated damages to the Employer at the rate 0.001 per cent of the Contract price per day for each day that the actual Completion Date is later than the Intended Completion Date except in the case of any of the occurrences listed under clause 9.2 The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

## 17. Completion and Taking Over

- 17.1 Upon deciding that the Work is complete the Contractor shall request the Employer's Representative to issue a Certificate of Completion of the Works, upon deciding that the Work is completed.

The Employer shall take over the Site and the Works within seven days of the Employer's Representative issuing Certificate of Completion.

## 18. Termination

18.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following;

- (a) The Contractor stops Work for 30 days continuously without reasonable cause or authority from the Employer's Representative;
- (b) The Contractor is declared bankrupt or goes into liquidation other than for rare construction or amalgamation;
- (c) A payment certified by the Employer's Representative is not paid by the Employer to the Contractor within 30 days after the expiry of the payment periods stated in subclauses 14.2 and 14.3 hereinabove.
- (d) The Employer's Representative 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.

18.2 If the Contract is terminated, the Contractor shall stop Work immediately, and leave the Site as soon as reasonably possible. The Employer's Representative shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

## 19. Payment Upon Termination

19.1 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on Site, plant, equipment and temporary works.

19.2 The Contractor shall, during the execution or after the completion of the Works under this clause, remove from the Site as and when required within such reasonable time as the Employer's Representative may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to him, and in default thereof, the Employer may without being responsible for any loss or damage) remove and sell any such property of the Contractor, the proceeds less all costs incurred to the credit of the Contractor.

19.3 Until after completion of the Works under this clause, the Employers

shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts there for the Employer's Representative shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract, the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

## 20. Corrupt Gifts and Payments of Commission

20.1 The Contractor shall not;

- (a) Offer or give or a greet or give to any person in the service of the Employer any gifts or consideration of any kind as an inducement or reward for doing or for bearing to do or for having done or for borne to do any act in relation to the obtaining or execution of this or any other contract with the Employer or for showing or forbearing to show favor or disfavor to any person in relation to this or any other contract with the Employer.
- (b) Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the Laws of Kenya.

## 21. Settlement of Disputes

21.1 Any dispute arising out of the Contract which cannot be amicably settled between the parties shall be referred by either party to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the chairman of the Chartered Institute of Arbitrators, Kenya branch, on the request of the applying party.



## **SECTION IV – APPENDIX TO CONDITIONS OF CONTRACT**

THE EMPLOYER IS

Name: COUNTY GOVERNMENT OF MARSABIT

CHIEF OFFICER, DEPARTMENT OF ROADS AND TRANSPORT

Address: P.O BOX 384-60500, MARSABIT.

The Project Manager: ROADS PROJECT ENGINEER

The name (and identification number) of the Contract is **SPOT IMPROVEMENT WORKS/CONSTRUCTION OF LKALKUMBE TO GATAB ROADS**

.....  
.....

## **SECTION V– STANDARD FORM**

- (i) Form of Invitation for Tenders
- (ii) Form of Tender
- (iii) Letter of Acceptance
- (iv) Form of Agreement
- (v) Form of Tender Security
- (vi) Performance Bank Guarantee
- (vii) Bank Guarantee for Advance Payment
- (viii) Qualification Information
- (ix) Tender Questionnaire
- (xi) Confidential Business Questionnaire
- (x) Statement of Foreign Currency Requirement
- (xi) Details of Sub-Contractors
- (x) Request for Review Form



performance of the contract under the terms of a Bond to be approved by you.

We agree to abide by this bid for the period of 120 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

We understand that you are not bound to accept the lowest or any bid you may receive.

On the basis of our previous experience we are fully experienced and competent in the type of work included in this BID and we have adequate financial resources to carry out the works described within the period for completion. We are in a position to fulfil the contract for which we have Bided.

Dated this ..... Day of .....20  
.....

Signature.....in the capacity of  
.....

Duly authorized to sign bids on behalf of (Name of Bidder)  
.....

(Address of Bidder).....

(Name of Witness).....

(Signature of Witness).....

(Address of Witness).....

(Occupation of Witness).....

**LETTER OF ACCEPTANCE**

\_\_\_\_\_ [date]

To: \_\_\_\_\_  
[name of the Contractor]

\_\_\_\_\_  
[address of the Contractor]

Dear Sir,

This is to notify you that your Tender dated \_\_\_\_\_  
for the execution of \_\_\_\_\_

\_\_\_\_\_ of  
[name of the Contract and identification number, as given in the Tender documents] for the Contract Price of Kshs. \_\_\_\_\_

[amount in figures] [Kenya Shillings \_\_\_\_\_ (amount in words) ] in accordance with the Instructions to Tenderers is hereby accepted.

You are hereby instructed to proceed with the execution of the said Works in accordance with the Contract documents.

Authorized \_\_\_\_\_ Signature  
Name and Title of Signatory  
.....

Attachment : Agreement

**FORM OF AGREEMENT**

THIS AGREEMENT, made the \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_ between **COUNTY GOVERNMENT OF MARSABIT**[whose registered office is situated at] **P.O BOX 384, MARSABIT, KENYA**(hereinafter called “the Employer”) of the one part AND

\_\_\_\_\_ of [or whose registered office is situated at] \_\_\_\_\_ (hereinafter called “the Contractor”) of the other part.

WHEREAS THE Employer is desirous that the Contractor executes

SPOT IMPROVEMENT WORKS ON.....

Contract No:.....(Hereinafter called “the Works”) located at **Marsabit County** [Place/location of the Works] and the Employer has accepted the tender submitted by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the Contract Price of Kshs \_\_\_\_\_ [Amount in figures], Kenya

Shillings \_\_\_\_\_

[Amount in words].

NOW THIS AGREEMENT WITNESSETH as follows:

1. This amount includes the following Provisional Sums to be expended only on prior authorization by the Employer based on the recommendation of the Engineer:

(a) Kshs.----- in respect of Provisional Sums

(b) Kshs. -----only) in respect of Contingencies.

In accordance with the provisions of the contract, the Employer shall be the County Government of Marsabit, Chief Officer, Department of Roads & Transport. The Employer's Representative is the Roads Project Engineer who will be the Project Manager for the works for the Contract as provided for under Clause 3.1 Section III of the Conditions of the Contract.

The Powers and Authority of the Engineer's Representative shall be notified to you in writing.

You are now required to give a formal written unconditional acceptance of this offer and provide a Power of Attorney from a Commissioner of Oaths or Public Notary.

This Notification of Award shall lead to conclusion of a contract between the parties, which shall be confirmed through the signing of the Contract Agreement by you, the Employer and the same countersigned by the Chief Officer, Ministry of Finance.

On signing the contract, you should provide within 14days the following:

- a) Performance Security in the form of a Bank Guarantee as stated in the Appendix to the Form of Tender.
  - b) A detailed and resourced Program of Works with superimposed cash flow based on the Three (3) months time period for completion of the contract, both to be approved by the Project Manager, notwithstanding Clause 6.1 and 6.2 of the Conditions of Contract
2. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
  3. The following documents shall be deemed to form and shall be read and construed as part of this Agreement i.e.
    - (i) Letter of Acceptance
    - (ii) Form of Tender
    - (iii) Conditions of Contract Part I

- (iv) Conditions of Contract Part II and Appendix to Conditions of Contract
- (v) Specifications
- (vi) Drawings
- (vii) Priced Bills of Quantities

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.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The \_\_\_\_\_ common \_\_\_\_\_ Seal \_\_\_\_\_ of

Was hereunto affixed in the presence of \_\_\_\_\_

Signed Sealed, and Delivered by the said \_\_\_\_\_

Binding \_\_\_\_\_ Signature \_\_\_\_\_ of \_\_\_\_\_ Employer

In the presence of \_\_\_\_\_ (i)  
Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

Binding \_\_\_\_\_ Signature \_\_\_\_\_ of \_\_\_\_\_ Contractor

In the presence of

[ii] \_\_\_\_\_ Name

Address \_\_\_\_\_

Signature \_\_\_\_\_

**FORM OF TENDER SECURITY**

WHEREAS .....(hereinafter called “the Tenderer”) has submitted his tender dated ..... for the construction of ..... (name of Contract)

KNOW ALL PEOPLE by these presents that WE ..... having our registered office at .....(hereinafter called “the Bank”), are bound unto .....(hereinafter called “the Employer”) in the sum of Kshs..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Bank this ..... Day of .....20.....

THE CONDITIONS of this obligation are:

1. If after tender opening the tenderer withdraws his tender during the period of tender validity specified in the instructions to tenderers  
Or
2. If the tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
  - (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the said date.

\_\_\_\_\_  
\_\_\_\_\_  
[date]

[signature of the Bank]

\_\_\_\_\_  
\_\_\_\_\_  
[witness]

[seal]



**PERFORMANCE BANK GUARANTEE**

To: \_\_\_\_\_(Name of Employer)  
\_\_\_\_\_(Date)  
\_\_\_\_\_(Address of Employer)

Dear Sir,

WHEREAS \_\_\_\_\_(hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_ (hereinafter called "the Works");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized 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 Kshs. \_\_\_\_\_ (amount of Guarantee in figures) Kenya Shillings \_\_\_\_\_ (amount of Guarantee in words), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings \_\_\_\_\_ (amount of Guarantee in words) 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, addition 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 change, addition, or modification.

This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR

\_\_\_\_\_

Name of Bank

\_\_\_\_\_

Address

---

Date

---

## BANK GUARANTEE FOR ADVANCE PAYMENT

To: \_\_\_\_\_ [name of Employer]  
\_\_\_\_\_ (Date)  
\_\_\_\_\_ [address of Employer]

Gentlemen,

Ref: \_\_\_\_\_ [name of Contract]

In accordance with the provisions of the Conditions of Contract of the above-mentioned \_\_\_\_\_ Contract, We, \_\_\_\_\_ [name and Address of Contractor] (hereinafter called "the Contractor") shall deposit with \_\_\_\_\_ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of Kshs. \_\_\_\_\_ [amount of Guarantee in figures] Kenya Shillings \_\_\_\_\_ [amount of Guarantee in words].

We, \_\_\_\_\_ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to \_\_\_\_\_ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs \_\_\_\_\_ [amount of Guarantee in figures] Kenya Shillings

\_\_\_\_\_ [amount of Guarantee in words], such amount to be reduced periodically by the amounts recovered by you from the proceeds of the Contract.

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 \_\_\_\_\_ [name of Employer] 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.

No drawing may be made by you under this guarantee until we have received notice in writing from you that an advance payment of the amount listed above has been paid to the Contractor pursuant to the Contract.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until \_\_\_\_\_ (name of Employer) receives full payment of the same amount from the Contract.

Yours faithfully,

Signature

and

Seal

---

Name of the Bank or financial institution \_\_\_\_\_

Address

---

Date

---

---

Witness:      Name:

---

Address:

---

Signature:

---

Date:

---

**CONFIDENTIAL BUSINESS QUESTIONNAIRE**

You are requested to give the particulars indicated in Part 1 and either Part 2 (a), 2 (b) or 2 (c) and 2 (d) whichever applies to your type of business.

You are advised that it is a serious offence to give false information on this Form.

*Part 1 – General*

Business Name .....

Location of business premises; Country/Town.....

Plot No..... Street/Road .....

Postal Address..... Tel No.....

Nature of Business.....

Current Trade License No..... Expiring date.....

Maximum value of business which you can handle at any time: K. pound.....

Name of your bankers.....

Branch.....

*Part 2 (a) – Sole Proprietor*

Your name in full..... Age.....

Nationality..... Country of Origin.....

\*Citizenship details .....

*Part 2 (b) – Partnership*

*Give details of partners as follows:*

	<i>Name in full</i>	<i>Nationality</i>	<i>Citizenship Details</i>	<i>Shares</i>
1.....				
2.....				
3.....				

***Part 2(c) – Registered Company:***

Private or public.....

State the nominal and issued capital of the Company-

Nominal Kshs.....

Issued Kshs.....

Give details of all directors as follows:

Name in full .Nationality. Citizenship Details\*. Shares.

1.  
.....  
.....

2.  
.....  
.....

3.  
.....  
.....

4.  
.....  
.....

**Part 2(d) – Interest in the Firm:**

Is there any person / persons in .....(Name of Employer)  
who has interest in this firm? Yes/No.....(Delete as  
necessary)

I certify that the information given above is correct.

.....  
(Title) (Signature) (Date)

- Attach proof of citizenship

**LETTER OF NOTIFICATION OF AWARD**

Address of Procuring Entity

\_\_\_\_\_  
\_\_\_\_\_

To: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RE: Tender No. \_\_\_\_\_

Tender Name \_\_\_\_\_

This is to notify that the contract/s stated below under the above mentioned tender have been awarded to you.

\_\_\_\_\_  
\_\_\_\_\_

1. Please acknowledge receipt of this letter of notification signifying your acceptance.
2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

*(FULL PARTICULARS)* \_\_\_\_\_  
\_\_\_\_\_

SIGNED FOR ACCOUNTING  
OFFICER

FORM SD1

**SELF DECLARATION FORMS (r 62)**

**REPUBLIC OF KENYA**

**PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)**

**SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT 2015.**

I, .....of P. O. Box ..... being a resident of ..... in the Republic of ----- do hereby make a statement as follows:-

1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of ..... (insert name of the Company) who is a Bidder in respect of **Tender No.** ..... for .....(insert tender title/description) for .....( insert name of the Procuring entity) and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.

3. THAT what is deponed to hereinabove is true to the best of my knowledge, information and belief.

.....  
(Title) (Signature) (Date)

Bidder Official Stamp

**Note:** This form MUST be filled, signed and submitted by all the bidders participating in this tender. This is a mandatory requirement under the new



Public Procurement Asset and Disposal Act 2015 that came into effect on 7<sup>th</sup>  
January 2016

|

FORM SD2  
**SELF DECLARATION FORMS (r 62)**

**REPUBLIC OF KENYA**

**PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)**

**SELF DECLARATION THAT THE PERSON/TENDERER WILL NOT ENGAGE IN ANY CORRUPT OR FRAUDULENT PRACTICE**

I, .....of P. O. Box ..... being a resident of ..... in the Republic of ----- do hereby make a statement as follows:-

1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of ..... (insert name of the Company) who is a Bidder in respect of **Tender No.** ..... for .....(insert tender title/description) for .....(insert name of the Procuring entity) and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of .....( insert name of the Procuring entity) which is the procuring entity.

3. THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of .....(name of the procuring entity)

4. THAT the aforesaid Bidder will not engage /has not engaged in any corrosive practice with other bidders participating in the subject tender

5. THAT what is deponed to hereinabove is true to the best of my knowledge information and belief.

.....  
(Title) (Signature) (Date)  
Bidder's Official Stamp

**Note:** This form MUST be filled, signed and submitted by all the bidders participating in this tender. This is a mandatory requirement under the new Public Procurement Asset and Disposal Act 2015 that came into effect on 7<sup>th</sup> January 2016

**FORM RB 1**

**REPUBLIC OF KENYA**

**PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD**

APPLICATION NO.....OF.....20.....

BETWEEN

.....APPLICANT

AND

.....RESPONDENT (*Procuring Entity*)

Request for review of the decision of the..... (*Name of the Procuring Entity*) of .....dated the...day of .....20.....in the matter of Tender No.....of .....20...

**REQUEST FOR REVIEW**

I/We.....,the above named Applicant(s), of address: Physical address.....Fax No.....Tel. No.....Email ....., hereby request the Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds , namely:-

- 1.
- 2.

By this memorandum, the Applicant requests the Board for an order/orders that: -

1.

2.

SIGNED .....(Applicant)

Dated on.....day of ...../...20...

---

**FOR OFFICIAL USE ONLY**

Lodged with the Secretary Public Procurement Administrative Review Board  
on ..... day of.....20.....

SIGNED

Board Secretary

**SECTION VI – SPECIFICATIONS, DRAWINGS & BILLS OF QUANTITIES**

**STANDARD SPECIFICATIONS**

Standard Specifications refers to the Standard Specifications for Road and  
Bridge Construction, 1986 Edition.

## SECTION 11: SPECIAL SPECIFICATIONS

### SPECIAL SPECIFICATIONS

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## SECTION 1 - GENERAL

### 101 SPECIAL SPECIFICATIONS.

Special specification is supplementary to the Standard Specifications and the two must be read in conjunction. In any case where there appears to be conflict between the two then the Special Specifications will take precedence

### 102 EXTENT OF CONTRACT.

#### **Project location**

The project area is about 2000 m<sup>2</sup> located in Kianyaga Town in Baragwi Ward. It will drain all the storm water from the main road and from the shops. This will make the town clean as the road will be replaced with tarmac pavement.

#### ***Topography***

The area is one of the major Towns in the County generally sloping towards the coast and has a lot of activities. It is the Central Market place attracting merchants from all over. The parking bays will organise how the vehicles are parked, make the place all weather and enable the County to collect revenue.

**Cross – section and drainage conditions:** A Typical layout and cross section is attached to this document for reference.

**Vertical and horizontal alignment:** The improvement works shall be done on the existing alignment area.

#### **Scope of works**

The Works to be executed under the Contract comprise mainly of but are not limited to the following:

- a) Site clearance
- b) Earthworks and reshaping to improve the alignment and restore camber

- c) Provision of gravel wearing course
- d) Provision of Hand packed stones
- e) Improvement of drainage and installation of pipe culverts.
- f) Passage of traffic through the works.
- g) Auxiliary works
- h) Defects liability shall be **6 months** after substantial completion of the works.

#### **104 PROGRAMME OF EXECUTION OF THE WORKS**

The contractor shall provide the works programme, required under clause 14 of the Conditions of Contract, within 21 days of receipt of the Engineer's Order to commence work.

The programme shall be coordinated with climatic and other conditions to provide for the completion of the works in the order and by the time specified.

The Contractor shall carry out the contract in accordance with the programme agreed with the Engineer, but he shall in no manner be relieved by the Engineer's approval of the programme, of his obligation to complete the works in the prescribed order and by the prescribed completion date and he shall from time to time review his progress and make such amendments to his rate of execution of the works as may be necessary to fulfill his obligations.

#### **105 ORDER OF EXECUTION OF WORKS**

In addition to Clause 105 of the Standard Specification the Contractor shall carry out the Works such that a continuous and consecutive output of fully completed work is achieved.

#### **107 TAKING OVER CERTIFICATE**

The minimum length of road for which a certificate will be issued under Clause 48 of the Conditions of Contract is the entire length of the road when substantially completed.

#### **109 NOTICE OF OPERATIONS**

Add the following sub- Clause.

##### **109.1 Notification Terms**

It shall be the Contractor's responsibility to notify the Engineer when any item of works scheduled are completed and ready for approval, and the contractor shall give sufficient notice to allow



control test to be performed.

#### 109.2 Explosive and Blasting

- (a) The requirements of the Laws of Kenya governing explosives and other requirements and regulations of Government of Kenya and other authorities shall be complied with.
- (b) No explosives of any kind shall be used without prior written consent of the Engineer.
- (c) The Contractor shall be solely responsible for the provision, handling, storage and transporting of all explosive ancillary materials and all other items of related kind whatsoever required for blasting.

### **117 HEALTH, SAFETY AND ACCIDENTS**

Add to section 117 the following:

In addition to providing, equipping and maintaining adequate first aid stations throughout the works in accordance with the laws of Kenya, the contractor shall provide and maintain on site during the duration of the Contract, a fully equipped dispensary. This shall be with a qualified Clinical Officer / Nurse who shall offer the necessary medical advice on HIV and related diseases to the Engineer's and Contractor's Site staff. The Contractor shall allow for this in the rates and be responsible for all site welfare arrangements at his own cost.

### **121 DIVERSION OF SERVICES**

- (a) The Contractor shall acquaint himself with the location of all existing services such as telephone lines, electricity cables, water pipes, sewers etc., before execution of any works that may affect the services. The cost of determining the location of the existing services together with making good or repairing of any damage caused all to the satisfaction of the Engineer shall be included in the tender rates.
- (b) Subject to the agreement with the Engineer, the Contractor shall be responsible for removal of alteration and relocation of existing services.
- (c) The Contractor shall indemnify the Employer against claims originating from damage to existing services or works.

### **123 LIAISON WITH GOVERNMENT AND POLICE OFFICIALS**

The Contractor shall keep in close touch with the Police and the other Government officials of the area regarding their requirements in the control of traffic or other matters, and shall provide all assistance or facilities, which may be required by such officials in the execution of their duties.

124

**LAND FOR ALL CAMPS SITES AND FOR THE CONTRACTOR'S OWN PURPOSES, INCLUDING TEMPORARY WORKS.**

Notwithstanding Clause 124 of the Standard Specification all requirements of land for temporary works and construction purposes shall be to the approval of the Engineer but the Contractor will make all necessary arrangements with the property owners concerned and pay all charges arising there from. On or before completion of the Contract, the Contractor shall remove all temporary works and shall restore all such land to the condition in which it was immediately prior to the occupation thereof as far as reasonable and practicable. No separate payment will be made to the Contractor on account of these items and the Contractor must make due allowance for them in his rates.

Notwithstanding Clause 120 of the Standard Specifications, the Contractor shall be required to appoint a competent surveyor who will liaise with the Engineer on matters related to the demarcation of the existing road reserve, site measurements, removal and reinstatement of existing services.

128

**STORAGE OF MATERIALS**

All materials shall be stored on Site in a manner approved by the Engineer and the Contractor shall carefully protect from the weather all work and materials which may be affected thereby.

129

**TEST CERTIFICATES**

When instructed by the Engineer, the Contractor shall submit certificates of test from the suppliers of materials and goods required in connection with the works as the Engineer may require.

Such certificates shall certify that the materials or goods concerned have been tested in accordance with the requirements of the specifications and shall give the results of all the tests carried out. The Contractor shall provide adequate means of identifying the materials and goods delivered to the site with the corresponding certificates.

131

**SIGNBOARDS**

The Contractor shall provide and erect 1 (one) or two (2) publicity signboards on the site as directed. The Engineer shall as shown in the Drawings and as required direct the minimum dimensions of the boards. The boards shall be prepared primed and painted cream and lettered in black. The boards shall be of stout construction, resistant to the effects of weather.

- 134 ENGINEER'S LABORATORY**  
The Contractor shall pay for all materials testing and Staff Allowances.  
Payments shall be made under the relevant item of the BOQ on provision of receipt.
- 137 ATTENDANCE UPON THE ENGINEER AND HIS STAFF**  
The Contractor shall provide, pay (including all overtime) attendant staff to fulfil the requirements of Clause 137 of the Standard Specification. The number of staff required for these duties shall be not exceed 6No. The Contractor will be paid on a prime cost basis plus a percentage for overheads and profits under relevant item of the Bills of Quantities.
- 138 VEHICLES AND DRIVERS FOR THE ENGINEER AND HIS STAFF AND METHOD OF PAYMENT**  
Not Applicable
- 139 RECEIPTED ACCOUNTS**  
The Contractor may be instructed by the Engineer to make payments of general miscellaneous accounts for such items as stationary, stores and equipment and miscellaneous supervision personnel and claims or the Engineer may direct the Contractor to purchase or pay for the above. The Contractor will be paid on a prime cost basis plus a percentage for overheads and profits under relevant items of the BOQ.
- 140 ACCOMODATION FOR THE ENGINEER'S STAFF**  
Not Applicable
- 142 LIQUIDATED DAMAGES**  
Liquidated Damages at the rate shown in the Appendix to Form of Bid shall apply in the event of the works not being completed within the time for completion plus any extension of time which may be determined by the Engineer.
- 143 ENVIRONMENTAL PROTECTION**  
The Contractor shall ensure so far as is reasonably practicable and to the satisfaction of the Engineer; that the impact of the construction on the environment shall be kept to a minimum and that appropriate measures are taken to mitigate any adverse

effects during the construction.

(a) After extraction of materials, all borrows pits shall be back-filled to the satisfaction of the Engineer. In particular borrow pits near the project road shall be back-filled in such a way that no water collects in them.

(b) Spilling of bitumen, fuels, Oils and other pollutants shall be cleared up.

(a)

**SECTION 2 - MATERIALS AND TESTING OF MATERIALS**

**205 SOILS AND GRAVEL**

Whenever in the Contract Document a minimum California Bearing Ratio (CBR) is specified, the CBR of the material shall be determined at the specified state of compaction.

- a) After four days soaking in the case of neat materials and
- b) After seven days curing plus seven days soaking in the case of cement improved materials

## **SECTION 3 - SETTING OUT & TOLERANCES**

**301**

### **SETTING OUT**

The contractor while pegging out the distances shall ensure that the existing alignment is followed unless instructed otherwise by the Engineer.

## **SECTION 4- SITE CLEARANCE AND TOP SOIL STRIPPING**

### **401 SITE CLEARANCE**

Site Clearance shall be carried out as directed by the Engineer.

### **402 REMOVAL OF TOPSOIL**

Topsoil shall include up to 200mm depth or any unsuitable material encountered in existing or newly constructed drains, drainage channels, and accesses.

### **403 REMOVAL OF STRUCTURES, FENCES AND OBSTRUCTIONS**

When instructed by the Engineer, the Contractor shall demolish or remove structure and payment for this shall be made as per the bill item.

## **SECTION 5 – EARTHWORKS**

### **504 PREPARATION PRIOR TO FORMING EMBANKMENT**

Where benching is required for existing pavement to accommodate earthworks sub-grade or sub-base for widening the road, the rate for compaction of existing ground shall be deemed to cover this activity.

(b)

Excavation in the pavement of the existing road shall be kept dry. In the event of water penetrating the underlying layer, construction of the subsequent layers shall be postponed until the underlying layers are dry enough to accommodate the construction plant without deforming or otherwise showing distress.

Step construction shall be carried out per layer at the joint where excavating both vertically and perpendicular to the direction of the travel. The step shall be 500mm perpendicular to the direction of the travel and 150mm vertical unless otherwise instructed by the Engineer.

Special care shall be taken when compacting the new material at the joint ensuring that specified density is achieved.

### **505 CONSTRUCTION OF EMBANKMENTS**

Only material approved by the Engineer shall be used for fill in embankments.

Material with high swelling characteristics or high organic matter content and any other undesirable material shall not be used, unless specifically directed by the Engineer. Unsuitable material shall include:

- (i) All material containing more than 5% by weight or organic matter (such as topsoil, material from swamps, mud, logs, stumps and other perishable material)
- (ii) All material with a swell of more than 3% (such as black cotton soil)
- (iii) All clay of plasticity index exceeding 50.
- (iv) All material having moisture content greater than 105% of optimum moisture content (Standard Compaction)

Subgrade: Shall mean upper 300mm of earthworks either in-situ or in fill and subgrade shall be provided for as part of earthworks operation and payment shall be made as “fill”. The material for



subgrade shall have a CBR of not less than 8% measured after a 4 day soak in a laboratory mix compacted to a dry density of 100% MDD (AASHTO T99) and a swell of less than 1%.

Embankment repair: Where directed by the Engineer, any localized filling in soft, hard or natural; selected material requirements shall be executed in accordance with Clause 505.

## **508            COMPACTION OF EARTHWORKS**

At pipe culverts, all fill above ground level around the culverts shall be compacted to density of 100% MDD (AASHTO T.99) up to the level of the top of the pipes or top of the surround(s), if any and for a width equal to the internal diameter of the pipe on either side of the pipe(s) or surround(s) as applicable.

At locations adjacent to structures, all fill above ground level up to the underside of the sub-grade shall be compacted to density of 100% MDD (AASHTO T.99). In case of fill around box culverts this should be carried out for the full width of the fill and for a length bounded by the vertical plane passing through the ends of the wing walls.

Notwithstanding the provision of clause 503 of the standard Specification, Compaction of subgrade material (i.e. material immediately below formation) in cut areas shall not be carried out by the contractor in areas where the formation is formed in hard material, unless specific instructions to the contrary are issued by the Engineer.

Where improved sub-grade material shall be required, this shall be compacted and finished to the same standards and tolerances as those required for normal sub-grade and clauses in the specifications applying to normal sub-grade shall also apply.

## **511            BORROW PITS**

The first part of the Standard Specification is amended as follows:-

Fill material which is required in addition to that provided by excavation shall be obtained from borrow pits to be located and provided by the Contractor but to the approval of the Engineer contrary to what has been stated.

## **515            SIDE DRAINS**

Side drains shall be constructed in accordance with clause 515 of the Standard Specification. This item shall be paid under item no. 5.04.

**517 MEASUREMENT AND PAYMENT**

Notwithstanding the provisions of clause 517 of the standard specifications, the rate for compaction of fill in soft material shall allow for the requirements of clause 508 of the special specification and no extra payment shall be made for compaction around pipe culverts (100% MDD AASHTO T.99).

**517(e) Overhaul**

A free haul of 1.5 km shall be allowed.

**518 Grading and shaping**

Where directed by the Engineer, the Contractor shall carry out grading and shaping over the full width of the carriageway and side slopes, so that the final profile complies with a standard cross-section shown in the drawings. The grading involves scarification up to a maximum depth of 150 mm, reworking of material to render it uniform and not segregated, reshaping, grading to profile, removing of material from side drains to spoil as directed by the Engineer, watering and compacting to 95 % MDD AASHTO T180, to required carriageway surface tolerance and uniform cross-fall all as directed by the Engineer.

The whole width of the finished surface, after the grading shall be trimmed and cleared off as necessary to leave the surface and slopes smooth, even and free from fresh loose heaps or windrows, stones or boulders or rocks, vegetation or any other deleterious material.

**Measurement and Payment**

Payment shall be made for the plan area instructed and approved by the Engineer

Item: Grading

Unit: Square meters

**SECTION 6 - QUARRIES, BORROW PITS, STOCKPILES & SPOIL AREAS**

**601**

**GENERAL**

Notwithstanding any indications to the contrary in the Standard specification the Engineer will not make available to the Contractor any land for quarries, borrow pits, stockpiles and spoil areas, except for those areas in road reserves specifically approved by him.

The contractor will be entirely responsible for locating suitable sources of materials complying with the Standard and Special Specifications, and for the procurement, Wining, haulage to site of these materials and all costs involved therein. Similarly the contractor will be responsible for the provision and costs

involved in providing suitable areas for stockpiling materials and spoil dumps. Should there be suitable sites for spoil dumps or stockpiles within the road reserve forming the site of the works the Contractor may utilize these subject to the approval of the Engineer.

No additional payment will be made to the Contractor to cover costs arising from the requirements for this Clause and the Contractor must include these costs in the rates inserted into the Bills of Quantities.

## **SECTION 7 - EXCAVATION AND FILLING FOR STRUCTURES**

The Preliminary Materials Report included as Vol. II of the tender documents is only for guidance of the Tenderers and that the information therein is neither warranted nor guaranteed.

**703 EXCAVATION OF FOUNDATIONS FOR STRUCTURES**

Unless otherwise instructed by the Engineer, all excavated surfaces in material other than hard material, on which foundations for structures shall be placed, shall be compacted to 100% MDD (AASHTO T.99) immediately before structures are constructed.

Paragraph 4, last line: - Replace "95%" with "100%".

**707 BACKFILLING FOR STRUCTURES**

Unless otherwise instructed by the Engineer, all backfilling material shall be compacted to a minimum of 100% MDD (AASHTO T.99).

**709 EXCAVATION FOR RIVER TRAINING AND NEW WATER COURSES**

Payments for river training and establishment of new watercourses shall only be made where such work constitute permanent works. Works done for road deviation or other temporary works shall not qualify for payment.

**710 STONE PITCHING**

Stone pitching to drains, inlets and outlets of culverts to embankments and around structures shall consist of sound un weathered rock approved by the Engineer.

The stone as dressed shall be roughly cubical in shape with minimum dimensions of 150 x 150mm for normal thickness of stone pitching. The Engineer may instruct use of river stones and paid for as per the bill rate.

The surface to receive the pitching shall be compacted and trimmed to slope and the stone laid, interlocked and rammed into the material to give an even finished surface.

In areas where stone pitching has been damaged, the Contractor shall identify such areas and notify the Engineer for his agreement of the extent of the Works required and his approval and instructions to proceed with the Works. Stone Pitching Repair and Reconstruction shall be carried out in accordance with Clause 710 of the Standard Specifications.

The Works shall involve removal of the damaged stone pitching and reconstruction of the said areas in accordance with Clause 710 of the Standard Specifications by use of the sound salvaged material together with any necessary additional material where all such materials shall comply with Section 7 of the Standard Specifications.



**711**

## **GABIONS**

Where instructed by the Engineer the Contractor will install gabions as protection works to washout areas or bridge Piers and or Abutments. Gabions shall be constructed in accordance with Clause 711 of the Standard Specification.

In cases where existing gabions have been damaged, the Contractor shall identify them and notify the Engineer for his agreement of the extent of the Work required and his approval and instructions to proceed with the Works.

The Works shall involve removal of the damaged gabions / rocks, excavation to the correct levels and grades as directed by the Engineer, and in accordance with Clause 711 of the Standard Specifications and reconstruction with new gabions and other necessary materials as necessary. The damaged gabions shall be recovered and transported to the nearest County Yard or Kerugoya Office.

**712**

## **RIP-RAP PROTECTION WORK**

Quarry waste or similar approved material shall be used to backfill scoured and eroded side, outfall and cut-off drain. The material shall be compacted to form a flat or curved surface preparatory to stone pitching of drainage channels, existing and new scour checks as directed by the Engineer.

The surface to receive the pitching shall be compacted and trimmed to slope and the stone hand laid, interlocked and rammed into the material to give an even finished surface. The interstices of the Pitching shall be rammed with in situ material. The in situ material immediately behind the pitching shall be compacted to minimum density of 100% MDD compaction (AASHTO T.99)

**714**

## **BACKFILL BELOW STRUCTURES**

Where instructed this shall be carried out in compliance with the requirements of Clause 507 and 804 of the Standard Specification.

## **SECTION 8 - CULVERTS AND DRAINAGE WORKS**

### **801 SCOPE OF SECTION**

The operations specified in this section apply to the installation of drainage works and reinstatement and improvement of the same.

In addition, this Section covers:-

Replacement of existing 450mm pipe culverts by 600mm diameter or 900mm

Extending of existing 600mm and 900mm diameter pipes to be compatible with the increased road width.

Desilting and cleaning of existing pipes and outfall drains to make them free flowing.

### **804 EXCAVATION FOR CULVERTS AND DRAINAGE WORKS**

In the Standard Specifications, make the following amendments:

-

#### **(a) Removal of Existing Pipe Culverts**

Where instructed by the Engineer, the Contractor shall excavate and remove all existing blocked or collapsed culvert pipes of 450mm, 600mm and 900mm diameter including concrete surround, bedding, inlet and outlet structure.

The void left after removal of culvert pipes shall be widened as necessary to accommodate new concrete bedding, pipe and hunching.

The payment of this work shall be per linear metre of pipes removed, and the volume in m<sup>3</sup> of inlet/outlet structure removed. The void left by removal of these pipes shall be carefully preserved in order to accommodate replacement 600mm or 900mm diameter pipe culverts as shall be directed by the Engineer.

#### **(b) Removal of Other Existing Drainage Structures**

When instructed by the Engineer, the Contractor shall demolish or remove any other structure and payment for this shall be made on day work basis.

#### **(c) Excavation for Culverts and Drainage Works**

The Contractor shall carry out all excavations for new culverts and drainage works to the lines, levels, inclinations, and dimensions shown on the drawings or as instructed by the Engineer.

### **805 EXCAVATION IN HARD MATERIAL**



In the Standard Specifications, Sub-clauses 805(a) and 805 (b) delete “95%” and insert “100%”.

In sub-clause 809(a), paragraph 1, line 1, substitute “95%” with “100%”.

In sub-clause 809©, paragraph 2, line 4, between the words “compacted” and “and shaped” insert the words “to 100% MDD (AASHTO T.99)”.

Hard material is a material, which can be excavated only after blasting with explosives or barring, and wedging or the use of a mechanical breaker fitted with a rock point in good condition and operated correctly. Boulders of more than 0.2m<sup>3</sup> occurring in soft material shall be classified as hard material.

## **809 BEDDING AND LAYING OF PIPE CULVERTS**

Concrete pipes shall be laid on a 150mm thick concrete bed of class 15/20 and the pipes shall be bedded on 1:3 cement: sand mortar at least 50mm thick, 150mm wide and extending the full length of the barrel.

The rates inserted shall allow for compaction of the bottom of excavation to 95% MDD (AASHTO T.99).

## **810 JOINTING CONCRETE PIPES**

The concrete pipes for the culverts shall have ogee joints and will be joined by 1:2 cement: sand mortar and provided with fillets on the outside as described in clause 810 of the Standard Specification.

## **812 BACKFILLING OVER PIPE CULVERTS**

In the Standard Specifications, clause 812

- a) Delete paragraph 6 “for pipe culverts ..... depth of 150mm”, entirely.

The rates entered for laying of pipe culverts shall allow for backfilling to pipe culverts and compacting to 95% MDD (AASHTO T.99) and these works shall **not** be measured and paid for separately.

## **814 SUBSOIL DRAINS**

In the event of excavation for repairs exposing local seepage, springs or unacceptably high water table, the Engineer may instruct the provision of counter fort or French drains.

These drains shall consist of a trench excavated to the alignment, width, depth and gradient instructed by the Engineer,

and backfilled with approved compacted clean hard crushed rock material as specified in clause 815 of the standard specification. Where these drains lie within the carriageway the carriageway shall be reinstated with compacted graded crushed stone or stabilised gravel and surfaced with hot asphalt or a surface dressing as instructed by the Engineer.

**817**

## **REPAIRS TO DRAINS**

### **(i) Cleaning Existing Drains**

In areas of existing side drains, mitre or outfall drains where such are blocked, the Engineer shall instruct the Contractor to clean and clear the drains to free flowing condition.

The work shall consist of:

- (a) Stripping and removal of any extraneous material to spoil including vegetation and roots in the drains to the satisfaction of the engineer.
- (b) Spreading of any spoil to the satisfaction of the Engineer.
- (c) Shaping the drains to free flowing condition as directed by the Engineer.

Measurement and Payment for cleaning drains shall be by linear meter of drain cleaned measured as the product of plan area and vertical depth of extraneous material instructed to be removed. No extra payment will be made for removal of vegetation and roots.

### **(ii) Channels**

The Engineer may instruct that the Contractor provides open channels in place of existing sub drains where the latter may be damaged or in any other place. The rates entered by the Contractor in the bills of quantities must include for removal and disposal of any sub drain material, excavation to line and level, backfilling and compaction as directed by the engineer. The channels shall be constructed of precast class 20/20 concrete of minimum 80mm thickness and lengths or widths not exceeding 1000mm. Joints shall be at least 15mm wide filled with 1:2 cement sand mortar.

### **(iii) Rubble fills for protection work**

Quarry waste or similar approved material shall be used to back fill scoured and eroded side, outfall and cutoff drains. The material shall be compacted to form a flat or curved surface preparatory to stone pitching of drainage channels, existing and new scour checks as directed by the Engineer.

### **(iv) Stone Pitching**

Stone pitching shall be constructed in accordance with clause 710 of the standard Specification.

(v) Gabions

Gabions shall be constructed in accordance with clause 711 of the standard Specification.

(vi) Spoil Material

The Contractor shall be responsible for removal from site of all materials excavated in the course of undertaking works in this section of the specifications, unless suitable for re-use, and deposit of the material in a spoil dump to be approved by the Engineer.

**818 Concrete scour checks**

Concrete for scour checks shall be class 15/20 reinforcement shall be wire mesh A193 at the middle of the base of the wall, or as shown in the drawings or instructed by the Engineer.

**Item:** Concrete scour checks

**Unit:** M<sup>3</sup>

Concrete scour checks shall be measured in cubic meters of concrete placed calculated from the dimensions of the scour check shown on the drawings or as directed by the Engineer.

The rate for concrete scour checks shall include the cost of excavating, removing excavated material to spoil, providing and placing class 15/20 concrete, A193 reinforcement and shuttering, all complying with the requirement of the specifications.

**(b) Earth fills scour checks**

Earth fill scour checks shall be constructed using selected earth fill material, in accordance with section 5 of the specification, or as shown in the drawings or as instructed by the Engineer.

**Item:** Earth fill scour checks

**Unit:** M<sup>3</sup>

Earth fill scour checks shall be measured by cubic meters of earth fill calculated from the dimensions of the scour check shown on the drawings or as directed by the Engineer.

The rate for earth fill scour checks shall include for the cost of excavating, removing excavated material to spoil, providing, placing and compacting of the earth fill to at least 95% MDD (Standard Compaction) and trimming the slopes. An extra pitching the surfaces as per Clause 710 of the special specifications.

819

**CLEANING AND MAINTENANCE**

1.

2. (i) De-silting of Pipe Culverts

•

• Where instructed Contractor shall desilt the existing pipe culverts by removing all the material from the pipe to make them clean and free flowing.

• Measurement and payment shall be by the linear metres of pipes de-silted, regardless of diameter size.

## **SECTION 9 - PASSAGE OF TRAFFIC**

### **901 SCOPE OF THE SECTION**

The Contractor shall so arrange his work to ensure the safe passage of the Traffic at all times and if necessary construct and maintain an adequate diversion for traffic complete with all the necessary road traffic signs.

The contractor shall provide to the satisfaction of the Engineer adequate warning signs, temporary restriction signs, advance warning signs, barriers, temporary bumps and any other device and personnel equipped with two way radios to ensure the safe passage of traffic through the works.

When carrying out the Works the Contractor shall have full regard for the safety of all road users.

The Contractor shall also provide sign posts and maintain to the satisfaction of the Engineer all deviations necessary to complete the works. The contractor should allow for the costs of complying with the requirements of this clause in his rates.

The contractor will be deemed to have inspected the site and satisfied himself as to the adequacy of his bid for these works and no additional payments will be made to the contractor for any expenditure on traffic control or the provision of deviations. The employer shall not be liable for inadequate prior investigations of this nature by the contractor.

### **906 PASSAGE OF TRAFFIC THROUGH THE WORKS**

The Contractor shall arrange for passage of traffic through the works during construction and the cost of doing so shall be payable under Item 9.01. To this end, the contractor shall be deemed to have inspected the site Any damage caused by passing traffic through the works shall be made good at the contractor's own cost.

### **907 SIGNS, BARRIERS AND LIGHTS**

Contractor shall provide signs, barriers and lights as shown in the drawing in Book of Drawings at the locations where the traffic is being carried off the existing road to the deviation and back again to existing road. The Contractor shall provide ramps and carry out any other measures as instructed by the Engineer to safely carry traffic from the road to deviation.

Contrary to what has been specified in this clause the road signs provided shall be fully reflectorised and in conformity with clause 9.1 of the "Manual for Traffic Signs in Kenya Part II".

**909 ASSISTANCE TO PUBLIC**

In addition to provision of clause 909, Contractor shall maintain close liaison with the relevant authorities to clear any broken down or accident vehicles from the deviations and the main road, in order to maintain smooth and safe flow of the traffic.

**912 MEASUREMENT AND PAYMENT**

(a) Construct Deviation

The Contractor shall be paid only 50% of the rate for this when he completes deviation road to the satisfaction of the Engineer. The balance shall be paid in equal monthly instalments over the contract period, as he satisfactorily maintains the deviation (as per clause 904 and 905 above) when it is in operation.

## **SECTION 10 - GRAVEL WEARING COURSE**

### **1001 GENERAL**

The material for gravel wearing course shall be won from sources identified by the contractor but approved by the Engineer. Method B, specified in the Standard Specification, shall be used as the method of measurement.

The gravel to be used shall meet all the requirements of Clause 10 of the Standard Specification for Road and Bridge Construction. The compaction shall be at least 95 % MDD (AASHTO T180) at a moisture content of between 80% and 105% of the Optimum Moisture Content (AASHTO T180).

### **1003 MATERIAL REQUIREMENTS**

The material requirements for natural gravel for re-gravelling shall be as follows:

The grading of the gravel after placement and compaction on the road shall have a smooth grading curve within and approximately parallel to the following envelope.

Sieve (mm)	% by weight
37.5	100
28	85-100
20	85-100
14	65-100
10	55-100
5	35-92
2	23-77
1	18-62
0.425	14-50
0.075	10-40

The material shall have a minimum CBR of 20 at 95% MDD (AASHTO T180) and 4 day soak. The plasticity index shall not exceed 20%.

## **SECTION 12 - NATURAL MATERIAL SUBBASE AND BASE**

### **1201 GENERAL**

Where instructed by the Engineer, the Contractor shall undertake repairs, widening and reprocessing to the existing carriageway and shoulders in accordance with sections 12 and 14 of the Special Specifications.

#### **a) Areas to be scarified and reprocessed**

The contractor will scarify, add new material and reprocess sections as determined by the Engineer.

#### **b) Pavement repairs**

The Contractor will carry out repairs to base and subbase as directed by the Engineer and according to Specifications given in Sections 12 and 14 of the Standard Specifications.

#### **c) Pavement widening**

The Contractor shall, as directed by the Engineer, bench and compact the subgrade to 100% MDD (AASHTO T99), provide lay and compact material for subbase and base as directed by the Engineer and in accordance with Sections 5 and 12 of the Standard Specifications.

### **1203 MATERIAL REQUIREMENTS**

Natural materials for base and subbase shall conform to the specifications given in Section 12 of the Standard Specifications for Road and Bridge Construction for cement and lime improved base and subbase.

### **1209 MEASUREMENT AND PAYMENT**

Natural material for subbase and base shall be measured by the cubic metre placed and compacted upon the road calculated as the product of the compacted sectional area laid and the length.



1210

### **HAND PACKED STONE**

Hand packed stone base is a layer of hand laid stone of defined size and durable in nature, laid in a manner such that when proof rolled and compacted it forms a stable and dense matrix as a road base.

#### a) Material for Hand Packed Stone Base

This shall consist of durable stone with nominal base dimensions of 75 mm square and minimum height of 150 mm or when compacted to give a layer of 150 mm. The stone shall be class C with the following requirements:

<b>LAA</b>	<b>45 max</b>
<b>ACV</b>	<b>32 max</b>
<b>SSS</b>	<b>12 max</b>
<b>FI</b>	<b>30 max</b>
<b>CBR</b>	<b>60 min.</b>

It shall be free from foreign matter. The fines passing 0.425 mm sieve shall be **NONPLASTIC**

#### b) Laying

The stone shall be laid by hand closely together. The stone shall be carefully bedded and tightly wedged with suitable spalls. The base of the stone shall alternate with the apex in all directions or as directed by the Engineer. The layer shall be proof rolled with a loaded scrapper or truck with a minimum axle load of 8 tonnes in the presence of the Engineer who shall approve of its stability before compaction.

#### c) Compaction

This shall be by a steel wheeled roller of at least five tonnes per metre width of roll. It shall consist of four static runs or until there is no movement under the roller. There shall follow vibratory compaction until an average dry density of 85% minimum of specific gravity of stone has been achieved. No result shall be below 82% of specific gravity. The surface of the compacted layer shall then be levelled by quarry dust (0/6 mm). The dust shall have the following specifications:

The stone shall be class C

Grading

Sieve Size	% Passing
10	100
6.3	90-100
4	75-95
2	50-70
1	33-50
0.425	20-33
0.300	16-28
0.150	10-20
0.075	6-12

The dust shall be free from foreign matter and fines passing 0.425 mm sieve shall be **NON-PLASTIC**. The maximum layer shall be 40 mm or as directed by the Engineer

d) Measurement and Payment

Payment shall be by the cubic metre laid (m<sup>3</sup>). Measurement of volume shall be determined as the product of length and compacted thickness laid. The rate quoted for this item should include the cost for laying the levelling quarry dust layer, as no extra payment shall be made for this layer.

## 1211 REPROCESSING EXISTING PAVEMENT LAYERS

### (a) General

The existing surfacing and the base shall be reprocessed with additional material and the composite mixture shall be stabilized with 3 – 5 % cement as instructed by the Engineer to have CBR  $\geq$  160%

Before commencement of the work the Contractor shall propose plants and equipments he proposes to use for this activity.

The Contractor after approval of his proposal shall carry out test section in accordance with Section 3 of the Standard Specifications.

(b) The existing surfacing and base course shall be broken up to specified depth and reprocessed in place, where required. The underlying layers shall not be damaged, and material from one layer may normally not be mixed with that of another layer.

Where unauthorized mixing occurs or where the material is contaminated in any way by the actions of the Contractor, and the contaminated material does not meet the specified requirements of for the particular layer, he shall remove such material and replace it with other approved material, all at his own expense.

- (c) Any mixture composition of the new layer must not contain more than 30% of the bituminous material by volume. The mixture must not contain pieces of bound bituminous material larger than 37.5mm, and any such material shall be removed at the Contractor's cost.
- (d) The requirements for imported material used in the respective pavement layers shall comply with the limitations, norms, sizes and strengths specified in the Standard Specifications clause 1203(b) and (d) and shall be worked as per Section 14 of the Standard Specification.
- (e) Material reworked in-situ or that obtained from existing pavement is not expected to comply with the material requirements but the reworking should achieve the specified requirements.
- (f) Where the thickness of any existing pavement layer requires to be supplemented within reprocessing and the thickness of the additional material after compaction will be less than 100mm, the existing layer shall be scarified to a depth that will give a layer thickness of at least 100mm after compacting the loosened existing and the additional material.

### **Controlling the Reworked Depth**

The Contractor shall submit a proven method to method to control the depth of excavation, or layer to be reworked, to the Engineer for approval. The Engineer may order a trial section to be reprocessed before any major length of the road is rehabilitated.

### **Excavations**

Excavations in the pavement shall be kept dry. In the event of water penetrating the underlying layers, construction of the consecutive layers shall be postponed until the underlying layers are dry enough to accommodate the construction plant without deforming or otherwise showing distress.

Step construction shall be carried out per layer at the joint when excavating, both longitudinally (if appropriate) and perpendicular to the direction of travel. The step width shall be 500mm perpendicular to the direction of travel, and 150mm long longitudinally, unless otherwise instructed by the Engineer.

Special care shall be taken when compacting the new material at the joint, ensuring that the specified density is achieved.

### **Measurement and Payment**

(a) Item: In-situ reprocessing of existing pavement layers as subbase compacted to specified density (95% MDD AASHTO T180) and thickness.

Unit: M<sup>3</sup>

The tendered rate shall include full compensation for breaking up the existing pavement layer to specified depth, breaking down and preparing the material and the spreading and mixing in of any additional material

(a) Item: The addition of extra gravel to subbase.

Unit: M<sup>3</sup>

The tendered rate shall include full compensation for procuring and addition of the material to the in-situ scarified layers and the transportation of the material over a free-haul distance of 1Km. The tendered rates will also include full compensation for prospecting for materials and any payments necessary to acquire the specified quality material.

(b) Excavation of existing bituminous pavement materials including free-haul up-to 1Km.

Unit: M<sup>3</sup>

The tendered rates shall include full compensation for excavating the existing bituminous material from the pavement layers and for loading, transporting the material for a free-haul of 1 Km, off-loading and disposing of the materials as specified..

(c) Excavation of the existing pavement

Unit: M<sup>3</sup>

The tendered rate shall include full compensation for excavating the existing material from the pavement layers and for loading, transporting the material for a free-haul distance of 1 Km, off-loading and disposing of the material as specified.

Payment will only be made for breaking up and excavating existing pavement layers to the specified depth if the material is to be removed to spoil.

## **SECTION 17 - CONCRETE WORKS**

1703

## **MATERIALS FOR CONCRETE**

This work shall consist of placing selected approved material of 250mm minimum diameter on the foundation put after excavation to receive levelling concrete in accordance with these specifications and in conformity with the lines, grades and cross sections shown on the Drawings as directed by the Engineer.

### (a) Materials

Selected rock: The selected rock boulders to be placed for this work shall be hard, sound, durable quarry stones as approved by the Engineer. Samples of the stone to be used shall be submitted to and approved by the Engineer before any stone is placed.

The maximum size of the stone boulders shall be 300mm.

### (b) Construction Method

After completion of the structural excavation the surface of the loose soil shall be levelled and compacted. Then the stone of the above sizes shall be placed in one layer of 250mm over the compacted bed where the bottom slab will rest. Coarse sand shall be spread to fill up the voids in the stone boulders, and compaction with vibratory compactors should be performed to make this layer dense whereon a concrete of levelling course shall be placed.

### (c) Measurement and payment

Measurement for the bedding materials shall be made in cubic metres for the completed and accepted work, measured from the dimension shown on the Drawings, unless otherwise directed by the Engineer.

Payment for the bedding Materials for Levelling Concrete Works shall be full compensation for furnishing and placing all materials, all labour equipment, tools and all other items necessary for proper completion of the work in accordance with the Drawings and specifications and as directed by the Engineer.

1703(A)

## **LEVELLING CONCRETE (CLASS 15/20) FOR BOTTOM SLAB INCLUSIVE OF COST OF FORM WORKS**

This work shall consist of placing and leveling lean concrete class 15/20 over the prepared bed of stone boulders in the foundation for bottom slab and wing walls in accordance with these specifications and which conformity with the lines, grades,

thickness and typical cross-sections shown on the drawings unless otherwise directed by the Engineer.

(a) Materials for Levelling Concrete

Requirement for the concrete class 15/20 is specified as follows:-

Design compressive strength (28) days : 15N/mm<sup>2</sup>  
Maximum size of coarse aggregate : 20mm  
Maximum cement content: 300 kg/m<sup>3</sup>.  
Maximum water/cement ration of 50% with slump of 80mm.

(b) Construction Method

The bed of stone boulders upon which the levelling concrete will be placed shall be smooth, compacted and true to the grades and cross-section shall be set to the required lines and grades.

(c) Measurement and payment

Measurement for levelling concrete (class 15/20) shall be made in cubic metres completed and accepted levelling concrete work measured in place which is done in accordance with the Drawings and the Specifications.

Payment for this work shall be the full compensation for furnishing and placing all materials, labour, equipment and tools, and other incidentals to Specifications and as directed by the Engineer.

Pay item No. 17/02 Levelling Concrete Works (Class 15/20) for Box Culvert and wing walls inclusive of Cost of Form works.

**1703(B) REINFORCING BARS OF WALLS AND SLABS**

This work shall consist of furnishing, fabricating and placing in the concrete of the bottom slab, top slab, median wall, sidewalls, wing walls and aprons, reinforcing bars of the quality, type and size in accordance with these specifications in conformity with the requirements shown on the Drawings.

(a) Material:

Reinforcing bars shall be deformed and shall meet the requirements of British standard BS4461, unless otherwise called for the drawings or approved by the Engineer.

No reinforcing bar shall be delivered without a certificate guaranteeing the yield stress. The 54 reinforcing bar shall be kept off the ground, free from dirt, oil, grease, or

avoidable rust and stored within a building or provided with suitable covers.

If it is necessary for the Engineer to ascertain the quality of the reinforcing bars, the Contractor shall test the reinforcing bars, at his own expense, by means as directed by the Engineer.

(b) Construction Method

(i) Bar Bending Schedule:

The Engineer shall provide the Contractor with bending schedule showing the location types, sizes, bending dimensions and cut lengths of the reinforcing bar required to be fixed in the works.

(ii) Cutting and Bending:

Qualified men shall be employed for the cutting and bending, and proper application shall be provided for such work.

Bars shall be cut and bent cold to the dimensions indicated and with equipment and methods approved by the Engineer.

Stirrups and tie bars shall be bent around a pin having a diameter not less than 15 times the minimum diameter of the bar. Bends of other bars, where full tension in the bar may occur, shall be made around a pin having a diameter not less than 7.5 times the bar diameter as shown on the Drawings.

Reinforcing bars shall be accurately formed to the shapes and dimensions indicated on the Drawings, and shall be fabricated in a manner that will not injure the materials.

(c) Placing

Reinforcing bars shall be accurately placed in proper position, and so that they be firmly held during placing of concrete.

Bars shall be tied at all intersections by using annealed iron wire 0.9mm or larger diameter, or suitable clips.

Distances from the forms shall be maintained, corrected by means of metal hangers, metal blocks, metal supports or other supports approved by the Engineer.

The Engineer shall inspect reinforcing bars after placing. When a long time has elapsed after placing reinforcing bars, they shall be cleaned and inspected again by the Engineer before placing concrete.

(d) Splicing and Joint

When it is necessary to splice reinforcing bars at points, position and methods of splicing shall be determined based on strength calculations and approved by the Engineer.

In lapped splices, the bars shall be lapped by the required length, and wired

together at several points by using annealed iron wire larger than 0.9mm.

Exposed reinforcing bars intended for bonding with future extensions shall be effectively protected from injury and corrosion.

Oxyacetylene welding joint of reinforcing steel shall be done only if authorised by the Engineer in writing.

(e) **Measurement and Payment**

Bending and installation of reinforcing bar of piers and abutments shall be measured in terms of tons. The length of steel bar of each size will be shown on the drawings in which the bar length for splicing is excluded. In computing the weight to be measured, the theoretical weights of bars of the cross-section shown on the Drawings or authorised shall be used.

These weights are given in the following table: -

<b>Bar type and the Cross-section in millimeters</b>	<b>Weight of Bar in Kilograms—per 12m length of bar</b>
Y10	7.40
Y12	10.66
Y16	18.95
Y20	29.60
Y25	46.30

**1703 (C) FORMWORK FOR CULVERT WALLS AND SLABS**

This work shall consist of all temporary moulds for forming the concrete for culvert walls and slabs together with all temporary construction required for their support. Unless otherwise directed by the Engineer all formworks shall be removed on completion of the walls and slabs.

**a) Materials**

Forms shall be made of wood or metal and shall conform to the shape, lines and dimensions shown on the Drawings.

All timber shall be free from holes, loose material, knots, cracks, splits and warps or other defects affecting the strength or appearance of the finished structure.

Release Agents – Release agents shall be either neat oils



containing a surface activating agent, cream emulsions, or chemical agents to be approved by the Engineer.

## **b) Construction Method**

### **i. Formworks**

Formworks shall be designed to carry the maximum loads which may be imposed, and so be rigidly constructed as to prevent deformation due to load, drying and wetting, vibration and other causes. After forms have been set in correct location, they shall be inspected and approved by the Engineer before the concrete is placed.

If requested, the contractor shall submit to the Engineer working drawings of the forms and also, if requested, calculations to certify the rigidity of the forms.

Unless otherwise described in the Contract, all form joints for exposed surfaces of concrete shall form a regular pattern with horizontal and vertical lines continuous throughout each structure and all construction joints shall coincide with these horizontal and vertical lines. PVC pipes of 50mm diameter for weep holes shall be arranged as shown on the Drawings.

Unless otherwise specified, formwork shall be designed to form chamfers at all external corners whether or not such chamfers are shown on the Drawings to prevent cracks and other damage from arising.

The inside surface of forms shall be cleaned and coated with a releasing agent to prevent adhesion of the concrete. Release agents shall be applied strictly in accordance with the manufacturer's detailed instructions. The release agent shall be applied to the formwork prior to erection. Release agent must not come into contact with reinforcement. Immediately before concrete is placed, the forms shall be thoroughly cleaned and freed from sawdust, shavings, dust, mud or other debris by hosing with water. Temporary openings shall be provided in the forms to drain away the water and rubbish.

### **ii. Scaffolding**

All scaffolding required to support the forms shall be designed and constructed to provide necessary rigidity and support the loads without appreciable deflection or deformation.

Details, plans and structural and flexural calculations for scaffolding shall be submitted to the Engineer for approval, but in no case shall the contractor be relieved of his responsibility for the results obtained by use of these plans, etc.

### **(iii) Removal of formwork**

The time at which the formwork is truck shall be the Contractor's responsibility and the forms shall not be removed until the concrete strength has reached 20 N/mm<sup>2</sup>.

**(c) Measurement and Payment**

Formwork shall be measured as the net area, in square meters, in contact with the finished concrete surface of the walls and slabs. No measurement shall be allowed for formwork of temporary construction joints.

Payment for the Formworks shall be full compensation for furnishing, erecting, jointing all the forms for the concrete including furnishing and applying release agent, and construction of the required scaffolding to support the forms, all conforming to the shape, lines, grade and dimensions of the structure as shown on the Drawings, all in accordance with the Drawings and as directed by the Engineer.

**1703(D) CONCRETE WORKS (CLASS 25/20) OF CULVERT WALLS AND SLABS**

This work shall consist of furnishing, mixing, delivering and placing of the concrete for the construction of culvert walls and slabs, in accordance with these Specifications and in conformity with the requirements shown on the Drawings.

Concrete class 25/20 shall be used for Culvert walls and slabs.

**(a) Concrete Materials**

**(c)**

**(1) Cement:**

Cement shall be of Portland type and shall conform to the requirements of BS 12 or equivalent.

The contractor shall select only one type or brand of cement or others. Changing of type or brand of cement will not be permitted without a new mix design approved by the Engineer. All cement is subject to the Engineer's approval, however, approval of cement by the Engineer shall not relieve the Contractor of the responsibility to furnish concrete of the specified compressive strength.

Conveyance of cement by jute bags shall not be permitted. Storage in the Contractor's silo or storehouse shall not exceed more than two (2) months, and age of cement after manufacture at mill shall not exceed more than four (4) months. The Contractor shall submit to the Engineer for his approval the result of quality certificate done prepared by the manufacturer.

Whenever it is found out that cement have been stored too long, moist, or caked, the cement shall be rejected and removed from the project.

**(2) Aggregates**

Fine and coarse aggregates must be clean, hard, strong and durable, and free from absorbed chemicals, clay coating, or

materials in amounts that could affect hydration, bonding, strength and durability of concrete.

Grading of aggregates shall conform to the following requirements:

i. Grading of Fine Aggregates

Sieve Size	Percentage by Weight Passing
10 mm	100
5 mm	89-100
2.5 mm	60-100
1.2 mm	30-100
0.6 mm	15- 54
0.3 mm	5- 40
0.15 mm	0 - 15

ii. Grading of Coarse Aggregates

Size of Coarse Aggregate	Amounts finer than each standard sieve percentage by weight						
	40	30	25	20	15	10	5
2.5							
	100	-	-	90-100	-	30-69	0-
	10	-					

Other requirements for aggregates are as follows:

iii. Fine Aggregates

Fitness Modulus, AASHTO M-6 : 2.3 – 3.1

Sodium Sulphate Soundness, AASHTO T104 :  
Max. 10% loss

Content of Friable Particles AASHTO 112 :  
Max 1% by weight

Sand Equivalent, AASHTO T176 : Min. 75

iv. Coarse Aggregate

Abrasion, AASGTO T96 : Max.  
405 loss

Soft Fragment and shale, AASHTO M80: Max.  
5% by weight

Thin and elongated Pieces, AASHTO M80 :  
Max. 15%

(3) Water

All sources of water to be used with cement shall be approved by the Engineer. Water shall be free from injurious quantities of oil, alkali, vegetable matter and salt as determined by the Engineer.

(4) Admixture

Only admixture, which have been tested and approved in the site laboratory through trial mixing for design proportion shall be used.

Before selection of admixture, the Contractor shall submit to the Engineer the specific information or guarantees prepared by the admixture supplier.

The contractor shall not exclude the admixture from concrete proportions.

**Concrete class 25/20**

Concrete class 25/20 shall be used for culvert wing walls and slabs. The requirements of Concrete class 25/20 are provided as follows unless otherwise the Engineer will designate any alteration.

	Design compressive strength (28 days)	:
	25N/mm <sup>2</sup>	
20mm	Maximum size of coarse aggregates	:
	Maximum water/cement ratio of 45% with slump of 80mm	

(d) **Proportioning Concrete**

The Contractor shall consult with the Engineer as to mix proportions at least thirty (30) days prior to beginning the concrete work. The actual mix proportions of cement, aggregates, water and admixture shall be determined by the Contractor under supervision of the Engineer in the site laboratory.

The Contractor shall prepare the design proportions which has 120% of the strength requirement specified for the designated class of concrete.

No class of concrete shall be prepared or placed until its job-mix proportions have been approved by the Engineer.

(e) **Concrete Work**

(i) Batching

Batching shall be done by weight with accuracy of:

Cement	:	½ percent
Aggregate	:	½ percent
Water and Admixture	:	1 percent.

(d)

Equipment should be capable of measuring quantities within these tolerances for the smartest batch regularly used, as well as for larger batches.

The accuracy of batching equipment should be checked every month in the presence of the Engineer and adjusted when necessary.

(ii) Mixing and delivery

Slump of mixed concrete shall be checked and approved at an accuracy of +25mm against designated slump in these specifications.

(iii) Concrete in hot weather

No concrete shall be placed when the ambient air temperature is expected to exceed thirty three degrees celsius (33<sup>0</sup>c) during placement operations).

(iv) Concreting at night

No concrete shall be mixed, placed or finished when natural light is insufficient, unless an adequate approved artificial lighting system is operated, such night work is subject to approval by the engineer.

(v) Placing

In preparation of the placing of concrete, the interior space of forms shall be cleaned and approved by the engineer prior to placing concrete. All temporary members except tie bars to support forms shall be removed entirely from the forms and not buried in the concrete. The use of open and vertical chute shall not be permitted unless otherwise directed by the engineer.

The Contractor shall provide a sufficient number of vibrators to properly compact each batch immediately after it is placed in the forms.

(d) **Measurement and Payment**

Measurements for the Concrete Works Class 25/20 of culvert walls and slabs shall be made in cubic metres for the walls and slabs actually constructed, measured from their dimensions shown on the Drawings. Payment for the Concrete Works (Class 25/20) of culvert walls and slabs shall be the full compensation for furnishing all materials of the concrete mixing, delivering, placing and curing the concrete, equipment and tools, labour and other incidental necessary for the completion of the work in accordance with the Drawings and these Specifications and as directed by the Engineer.

**1703(E) CONCRETE WORKS (CLASS 30/20) OF IBDS**

This work shall consist of furnishing, mixing, delivering and placing of the concrete for the construction of insitu invert block drains in accordance with these Specifications and in conformity with the requirements shown on the Drawings.

Concrete class 30/20 shall be used for invert block drains and kerbs and channels.

**(a) Concrete Materials**

**(1) Cement:**

Cement shall be of Portland type and shall conform to the requirements of BS 12 or equivalent.

The contractor shall select only one type or brand of cement or others. Changing of type or brand of cement will not be permitted without a new mix design approved by the Engineer. All cement is subject to the Engineer's approval, however, approval of cement by the Engineer shall not relieve the Contractor of the responsibility to furnish concrete of the specified compressive strength.

Conveyance of cement by jute bags shall not be permitted. Storage in the Contractor's silo or storehouse shall not exceed more than two (2) months, and age of cement after manufacture at mill shall not exceed more than four (4) months. The Contractor shall submit to the Engineer for his approval the result of quality certificate done prepared by the manufacturer.

Whenever it is found out that cement have been stored too long, moist, or caked, the cement shall be rejected and removed from the project.

**(2) Aggregates**

Fine and coarse aggregates must be clean, hard, strong and durable, and free from absorbed chemicals, clay coating, or materials in amounts that could affect hydration, bonding, strength and durability of concrete.

Grading of aggregates shall conform to the following requirements:

**(i) Grading of Fine Aggregates**

Sieve Size	Percentage by Weight Passing
10 mm	100
6 mm	89-100
2.5 mm	60-100
1.2 mm	30-100
0.6 mm	15- 54
0.3 mm	5- 40

0.15 mm	0 - 15
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(ii) Grading of Coarse Aggregates

Size of Coarse Aggregate	Amounts finer than each standard sieve percentage by weight						
	40	30	25	20	15	10	5
2.5	100	-	-	90-100	-	30-69	0-
10	10	-	-	-	-	-	-

Other requirements for aggregates are as follows:

(iii) Fine Aggregates

- 3.1 Fitness Modulus, AASHTO M-6 : 2.3 –
- Sodium Sulphate Soundness, AASHTO T104 :  
Max. 10% loss
- Content of Friable Particles AASHTO 112 :  
Max 1% by weight
- Sand Equivalent, AASHTO T176 : Min. 75

(iv) Coarse Aggregate

- Abrasion, AASGTO T96 : Max.  
405 loss
- Soft Fragment and shale, AASHTO M80: Max.  
5% by weight
- Thin and elongated Pieces, AASHTO M80 :  
Max. 15%

(5) Water

All sources of water to be used with cement shall be approved by the Engineer. Water shall be free from injurious quantities of oil, alkali, vegetable matter and salt as determined by the Engineer.

(6) Admixture

Only admixture, which have been tested and approved in the site laboratory through trial mixing for design proportion shall be used.

Before selection of admixture, the Contractor shall submit to the Engineer the specific information or guarantees prepared by the admixture supplier.

The contractor shall not exclude the admixture from concrete proportions.

**Concrete class 30/20**

Concrete class 30/20 shall be used for invert drains, kerbs and channels. The requirements of Concrete class 30/20 are provided as follows unless otherwise the Engineer will designate any

alteration.

Design compressive strength (28 days) :  
30N/mm<sup>2</sup>  
Maximum size of coarse aggregates : 20mm  
Maximum water/cement ratio of 45% with slump of 80mm

(f) **Proportioning Concrete**

The Contractor shall consult with the Engineer as to mix proportions at least thirty (30) days prior to beginning the concrete work. The actual mix proportions of cement, aggregates, water and admixture shall be determined by the Contractor under supervision of the Engineer in the site laboratory.

The Contractor shall prepare the design proportions which has 120% of the strength requirement specified for the designated class of concrete.

No class of concrete shall be prepared or placed until its job-mix proportions have been approved by the Engineer.

(g) **Concrete Work**

(i) **Batching**

Batching shall be done by weight with accuracy of:

Cement : ½ percent  
Aggregate : ½ percent  
Water and Admixture : 1 percent.

(e)

Equipment should be capable of measuring quantities within these tolerances for the smartest batch regularly used, as well as for larger batches.

The accuracy of batching equipment should be checked every month in the presence of the Engineer and adjusted when necessary.

(ii) **Mixing and delivery**

Slump of mixed concrete shall be checked and approved at an accuracy of +25mm against designated slump in these specifications.

(iii) **Concrete in hot weather**

No concrete shall be placed when the ambient air temperature is expected to exceed thirty three degrees celsius (33<sup>0</sup>c) during placement operations).

(iv) **Concreting at night**



No concrete shall be mixed, placed or finished when natural light is insufficient, unless an adequate approved artificial lighting system is operated, such night work is subject to approval by the engineer.

(v) **Placing**

In preparation of the placing of concrete, the interior space of forms shall be cleaned and approved by the engineer prior to placing concrete. All temporary members except tie bars to support forms shall be removed entirely from the forms and not buried in the concrete. The use of open and vertical chute shall not be permitted unless otherwise directed by the engineer.

The Contractor shall provide a sufficient number of vibrators to properly compact each batch immediately after it is placed in the forms.

(d) **Measurement and Payment**

Measurements for the Concrete Works Class 30/20 of invert drains, kerbs and channels shall be made in cubic metres for the IBDs and No. for the kerbs and channels actually constructed, measured from their dimensions shown on the Drawings. Payment for the Concrete Works (Class 30/20) of culvert walls and slabs shall be the full compensation for furnishing all materials of the concrete mixing, delivering, placing and curing the concrete, equipment and tools, labour and other incidental necessary for the completion of the work in accordance with the Drawings and these Specifications and as directed by the Engineer.

**1703(F)**

**CABRO BLOCKS**

The concrete blocks shall be from a credible manufacturer and will be made of strength  $80\text{N/mm}^2$  . **Test certificate will be submitted to the Engineer before arrangements for delivery is made**

## **SECTION 20 - ROAD FURNITURE**

### **2004 PERMANENT ROAD SIGNS**

Permanent Road Signs shall be provided as directed by the Engineer and in compliance with the requirements of the "Manual for Traffic Signs in Kenya" Part II and Standard Specification clause 2004.

### **2004B EXISTING ROAD SIGNS**

Where directed by the Engineer, the Contractor shall take down road signs including all posts, nuts, bolts and fittings, and remove and dispose of the concrete foundation and backfill the postholes. The signs shall be stored at the Contractor's store and they shall become the property of the Employer who shall remove them prior to the expiry of the maintenance period.

Measurement and payment for taking down road signs shall be made by the number of signs of any type and size taken down, cleaned and stored as directed.

Where a salvaged existing sign complies with the requirements of new road signs, the Engineer may instruct the Contractor to remove the sign for safe storage, and re-erect it.

Measurement and payment shall be made by the number of road signs re-erected as directed and the rate shall include for excavation, concrete foundations and backfilling around posts and removal of surplus material to spoil.

### **2006 GUARDRAILS AND HANDRAILS**

Contrary to the Standard Specification, guardrail posts shall be concrete 200mm diameter set vertically at least 1.2m into the shoulder as directed by the Engineer. Spacer blocks shall also be made of concrete.

Beams for guardrails shall be "Armco Flex beam" or similar obtained from a manufacturer approved by the Engineer.

Handrails, steel bolts and nuts shall be provided on all bridges.

### **2007 ROAD MARKINGS**

This will be thermoplastic done as specified

## **BILLS OF QUANTITIES**

### **PREAMBLE TO BILL OF QUANTITIES**

1. The Bills of Quantities forms part of the Contract Documents and are to be read in conjunction with the Instructions to Bidders, Conditions of Contract Parts I and II, Specifications and Drawings.
2. The brief description of the items in the Bill of Quantities is purely for the purpose of identification, and in no way modifies or supersedes the detailed descriptions given in the conditions of Contract and Specifications for the full direction and description of work and materials.
3. The Quantities set forth in the Bill of Quantities are estimated and provisional, representing substantially the work to be carried out, and are given to provide a common basis for bidding and comparing of Bids. There is no guarantee to the Contractor that he will be required to carry out all the quantities of work indicated under any one particular item or group of items in the Bill of Quantities. The basis of payment shall be the Contractor's rates and the quantities of work actually done in fulfilment of his obligation under the Contract.
4. The prices and rates inserted in the Bills of Quantities will be used for valuing the work executed, and the Engineer will only measure the whole of the works executed in accordance with this Contract.
5. A price or rate shall be entered in ink against every item in the Bill of Quantities with the exception of items, which already have Provisional sums, affixed thereto. The bidders are reminded that no "nil" or "included" rates or "lump-sum" discounts will be accepted. The rates for various items should include discounts if any. Bidders who fail to comply will be disqualified.
6. Provisional sums in the Bill of Quantities shall be expended in whole or in part at the discretion of the Engineer in accordance with Sub-Clause 52.4 and Clause 58 of Part I of the Conditions of Contract.
7. The price and rates entered in the Bill of Quantities shall, except insofar as it is otherwise provided under the Contract, include all Constructional plant to be used, labour, insurance, supervision, compliance testing, materials, erection, maintenance of works, overheads and profits, taxes and duties together with all general risks, liabilities and obligations set out or implied in the Contract, transport, electricity and telephones, water, use and replenishment of all

consumables, including those required under the contract by the Engineer and his staff.

8. Errors in the pricing of the Bills of Quantities will be corrected in accordance with Clause (28) of instructions to bidders.

## **DRAWINGS**



**Road Code:**

**Package: LKALKUMBE TO GATAB**

**Contractor**

Bill of Quantities					Page 3	
Bill No. 4	Site Clearance				Project:	
Item No.	Description	Units	Quantity	Unit Bid Rate(kshs)	Amount (kShs)	Technology
04- 50 - 003	Excavation of soft material at the hill slope	m <sup>2</sup>	1600			LB
<b>Total carried forward to summary page</b>						

Road Code:

Package: LKALKUMBE TO GATAB

Contractor

Bill of Quantities					Page 4	
Bill No. 7	Excavation and filling for structures				Project:	
Item No.	Description	Units	Quantity	Unit Bid Rate(kshs)	Amount (kShs)	Technology
07 - 50 - 001	Provide balustrade of ARMO flex and 50mm diameter					
	galvanized steel pipe handrail with 124 by 75 by 8mm	LM	200			LB
	rectangular hollow section (RHS) support posts					
	each 2000mm c/c anchored in deck side beams					
07 - 50 - 002	500mm long 25mm diameter mild steel bolts properly					
	granted to receive deck girder	No.	200			LB
07 - 50 - 003	scour Checks	No.	60			LB
Total carried forward to summary page						



**Road Code:** CRP  
**Package:** LKALKUMBE - GATAB ROAD  
**Contractor**

Bill of Quantities					Page 2	
Bill No. 8	Site Clearance				Project:	
Item No.	Description	Units	Quantity	Unit Bid Rate(kshs)	Amount (kShs)	
04 - 80 - 001	Excavate from strip level to reduce level but not exceeding 0.3m	CM	90			LB
	<b>Fillings</b>					
04 -80 - 002	Provide and place selected and approved 0.5m hardcore filling consolidated and laid in layers of 150mm	CM	75			LB
04 - 80 - 003	50mm thick approved murrum or quarry dust blinding to hardcore	SM	150			LB
04 - 80 - 004	<b>BRC MESH FABRIC</b> Steel mesh fabric ref No. A142 weighing 2.22kg per square metre laid in surface bed	SM	150			LB
04 - 80 - 005	<b>Damp proofing</b> 500 gauge polythene or other equal and approved plastic sheet damp proof membrane laid horizontally over blinding with 300mm side and end laps.	SM	150			LB

04 - 80 - 006	Vibrated reinforced concrete (1:2:4)					
	Class 20/20 in.	CM	22.5			LB/MB
	150mm slab					
04 - 80 - 007	Provide erect and later dismantle and remove					
	formwork 75mm and not exceeding 150mm	LM	53			LB
	to sides of slab					
<b>Total carried forward to summary page</b>						

Road

Code:

Package: LKALKUMBE TO GATAB

Contractor

Bill of Quantities					Page 6	
Bill No. 10	Grading and Dozing Works				Project:	
Item No.	Description	Units	Quantity	Unit Bid Rate(kshs)	Amount (kShs)	Technology
10 - 50 - 001	Grade existing carriageway to camber, including slopes and ditches as instructed	m <sup>2</sup>	126000			MB
10 - 60 - 003	Dozing works at soft soils	m <sup>3</sup>	3750			MB
	Mobilization and demobilization of machinery	Hrs.	24			
<b>Total carried forward to summary page</b>						