

**REPUBLIC OF KENYA**



**COUNTY GOVERNMENT OF KIRINYAGA  
P. O. BOX 260-10304  
KUTUS**

**DEPARTMENT OF TRANSPORT, ROADS AND PUBLIC  
WORKS**

**OPEN TENDER**

**FOR**

**TENDER NO: CGK/SCM/TR&PW/OT/002/2018-2019**

**CONSTRUCTION OF THE PROPOSED KAGIO MATATU  
PARKING PHASE II SECTORS 6, 7, 8 & 9 IN KIINE WARD**

**NOTICE DATE: TUESDAY 19<sup>TH</sup> OCTOBER 2018 AT 11.00 A.M**

**CLOSING DATE: FRIDAY 2<sup>ND</sup> NOVEMBER 2018 AT 11.00 A.M**

# 1 Table of Contents

<b>SECTION I</b>	<b>- INVITATION TO TENDER .....</b>	<b>3</b>
<b>SECTION II</b>	<b>- INSTRUCTIONS TO TENDERERS .....</b>	<b>4</b>
<b>SECTION III</b>	<b>- INSTRUCTIONS TO TENDERERS .....</b>	<b>Error! Bookmark not defined.</b>
<b>SECTION IV</b>	<b>- CONDITIONS OF CONTRACT.....</b>	<b>Error! Bookmark not defined.</b>
<b>SECTION VI</b>	<b>- APPENDIX TO CONDITIONS OF CONTRACT.....</b>	<b>Error! Bookmark not defined.</b>
<b>SECTION VII</b>	<b>- STANDARD FORMS .....</b>	<b>Error! Bookmark not defined.</b>
<b>SECTION VI</b>	<b>- SPECIFICATIONS, DRAWINGS &amp; BILLS OF QUANTITIES .....</b>	<b>70</b>

## **SECTION I - INVITATION TO TENDER**

**TENDER NAME: THE PROPOSED CONSTRUCTION OF KAGIO MATATU PARKING PHASE II SECTORS 6, 7, 8 & 9 IN KIINE WARD**

**TENDER NO: CGK/SCM/TR&PW/OT/002/2018-2019**

The County Government of Kirinyaga invites sealed bids from all interested and eligible contractors for **THE PROPOSED CONSTRUCTION OF KAGIO MATATU PARKING PHASE II SECTORS 6, 7, 8 & 9 IN KIINE WARD.**

Interested and eligible contractors may obtain further information from and inspect the tender documents at Director Supply Chain Management Office, 1<sup>st</sup> Floor, Kirinyaga County Headquarters, Kutus during normal working hours.

A complete set of tender documents may be obtained by interested bidders from the Public Procurement Information Portal website <http://tenders.go.ke> or the County website [www.kirinyaga.go.ke](http://www.kirinyaga.go.ke). Bidders who download the documents from the website **MUST** forward their particulars (Name, contacts, physical address and the tender no./ description) immediately to [procurement@kirinyaga.go.ke](mailto:procurement@kirinyaga.go.ke) for recording and any further clarifications or addendums.

Tenders must be accompanied by a **Bid Security of Kshs 500,000.00** from a reputable bank or insurance firm approved by PPRA in the format provided valid for an **additional 30 days** beyond the tender validity period.

Complete tender documents, enclosed in plain sealed envelopes marked with Tender Number/Tender Description Reference shall be addressed to;

**The County Secretary & Head of Public Service,  
County Headquarters,  
P.O Box 260 – 10304,  
Kutus.**

and be deposited in the Tender Box at located at **1<sup>st</sup> Floor, County Government of Kirinyaga Headquarters, Kutus Town**, on or before **Friday 2<sup>nd</sup> November 2018 AT 11.00 A.M.**

Tenders will be opened immediately thereafter in the presence of the bidders or their representatives who choose to attend the opening at The County Headquarters, 3<sup>rd</sup> Floor, Conference Room.

Late bids **SHALL NOT** be accepted.

**HEAD, SUPPLY CHAIN MANAGEMENT  
FOR: COUNTY SECRETARY**

## SECTION II- INSTRUCTIONS TO TENDERERS

### Table of Clauses

	Page
2.1 Eligible tenderers.....	6
2.2 Eligible goods.....	6
2.3 Cost of tendering.....	6
2.4 Contents of Tender document.....	7
2.5 Clarification of documents.....	7
2.6 Amendment of documents.....	8
2.7 Language of tender.....	8
2.8 Documents comprising the tender.....	8
2.9 Tender forms.....	9
2.10 Tender prices.....	9
2.11 Tender currencies.....	9
2.12 Tenderers eligibility and qualifications.....	0
2.13 Goods' eligibility and conformity to tender documents.....	10
2.14 Tender security.....	11
2.15 Validity of tenders.....	12
2.16 Format and signing of tenders.....	13
2.17 Sealing and marking of tenders.....	13
2.18 Deadline for submission of tender .....	14
2.19 Modification and withdrawal of tenders.....	14
2.20 Opening of tenders.....	15
2.21 Clarification of tenders.....	15
2.22 Preliminary examination.....	15
2.23 Conversion to single currency.....	16
2.24 Evaluation and comparison of tenders.....	16
2.25 Contacting the procuring entity.....	17
2.26 Award of contract.....	17
(a) Post qualification.....	17
(b) Award criteria.....	17
(c) Procuring entity's right to vary quantities....	18
(d) Procuring entity's right to accept or reject any or all tenders .....	18
2.27 Notification of award.....	18
2.28 Signing of contract.....	18
2.29 Performance security.....	19
2.30 Corrupt or fraudulent practices.....	19

## **2.1 Eligible tenderers**

2.1.1 This Invitation to tender is open to all tenderers eligible as described in the instructions to tenderers. The successful Tenderer will be expected to complete the Works by the Intended Completion Date specified in the said Appendix

2.1.2 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.

2.1.3 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.

2.1.4 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.

2.1.5 A Mandatory pre-tender site meeting shall be held as specified in the appendix to instruction of tender. A representative of the Employer will be available to meet the intending tenderers at the venue.

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

## **2.2 Cost of Tendering**

2.2.1 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.

- 2.2.2 A complete set of tender documents may be obtained by interested bidders from the National Treasury Supplier Portal website <http://tenders.go.ke> or the County website [www.kirinyaga.go.ke](http://www.kirinyaga.go.ke). Bidders who download the documents from the website **MUST** forward their particulars (Name, contacts, physical address and the tender no./ description) immediately for recording and any further clarifications and addenda to [procurement@kirinyaga.go.ke](mailto:procurement@kirinyaga.go.ke)
- 2.2.3 All firms found capable of performing the contract satisfactorily in accordance with the set prequalification criteria shall be prequalified.

### 2.3. The Tender Document

- 2.3.1 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
- 2.3.2 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.

### 2.4 Clarification of Documents

- 2.4.1 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.
- 2.4.2 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.

## **2.5 Amendment of Documents**

- 2.5.1 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.
- 2.5.2 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.
- 2.5.3 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.

## **2.6 Language of Tender**

- 2.6.1 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.

## **2.7 Documents Comprising of Tender**

- 2.7.1 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

## **2.8 Tender Forms**

- 2.8.1 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.

## **2.9 Tender Prices**

- 2.9.1 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

2.9.2 Prices indicated on the Price Schedule shall include all costs including taxes, insurances and delivery to the premises of the entity.

2.9.3 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

2.9.4 The validity period of the tender shall be 120 days from the date of opening of the tender.

### **2.9.5 Tender Currencies**

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

### **2.11 Tenderers Eligibility and Qualifications**

2.11.1 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.

2.11.2 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

2.11.3 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.

### **2.12. Goods Eligibility and Conformity to Tender Documents**

2.12.1 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



2.12.2 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.

2.12.3 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.

2.12.4 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 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

2.14.3 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.

2.14.4 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

2.14.5 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.

2.14.6 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

2.14.7 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 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) (a) be addressed to the Procuring entity at the address given in the Invitation to Tender:
- (b) Bear, tender number and name in the Invitation for Tenders and the words, "DO NOT OPEN BEFORE," **Friday, 2<sup>nd</sup> November 2018 AT 11.00 A.M.**

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 no later than **Friday, 2<sup>nd</sup> November 2018 AT 11.00 A.M.**

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 **Friday, 2<sup>nd</sup> November 2018 AT 11.00 A.M.** 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 2.24 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 tenderer's 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

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

2.27.6 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/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.

<b>ITT Clause Number</b>	<b>Amendments of, and Supplements to, Clauses in the Instruction to Tenderers</b>
2.1.1	Eligible tenderers: <b>Open to all interested and Eligible contractors</b>
2.1.5	Tenderers are required to attend a mandatory <b>Pre-Bidding &amp; Site Visit meeting on Friday, 26<sup>th</sup> October, 2018 at 11.00am</b> . Tenderers will converge at Kirinyaga County Headquarters, 3rd floor, Conference Room before heading to the site. All interested prospective bidders should attend.
2.4.1	The address for clarification of Tender documents is Attention: <b>The Head Supply Chain Management, County Government of Kirinyaga, P.O. Box 260 – 10304, Kutus.</b>
2.6.1	The Language of all correspondence and documents related to the Tender is: <b>English</b>
2.9.3	The prices shall be <b>FIXED</b>
2.10.1	Prices shall be quoted in <b>Kenya Shillings</b>
2.14.1	The Tender Security shall be; <b>Bid Security of Kshs 500,000.00</b> from a reputable bank or insurance firm approved by PPRA in the format provided valid for an <b>additional 30 days</b> beyond the tender validity period
2.15.1	The Tender validity period shall be <b>120 days</b> .
2.16.2	The number of copies of the Tender to be completed and returned shall be: <b>One (1) original and two (2) copies</b> .
2.17.2	<b>Tender shall be submitted to:</b>  <b>The Head Supply Chain Management, County Government of Kirinyaga, P.O. Box 260 – 10304, Kutus.</b>
2.20.1	<b>The Tender opening shall take place at:</b>  Kirinyaga County Headquarters, 3 <sup>rd</sup> floor, Conference Room. Date: <b>Friday, 2<sup>nd</sup> November 2018</b> Time: <i>11.00am local time.</i>

2.22	<p>The Preliminary evaluation shall be mandatory:</p> <p>The evaluation shall adopt <i>YES/ No Approach</i>. The non-responsive submissions will be eliminated from the entire preliminary evaluation process and will not be considered further.</p> <p>Bidders must submit the following documents and Must be certified (signed and stamped) by commissioner of oaths/advocate registered in Kenya:</p> <ul style="list-style-type: none"> <li>• Valid current year business permit.</li> <li>• Valid current Tax Compliance Certificate.</li> <li>• Certificate of incorporation.</li> <li>• CR 12 Certificate/ Form</li> <li>• NCA road works-category 6 and above.</li> <li>• PIN/VAT certificate from KRA</li> <li>• Bank statements for the last One year</li> <li>• Lines of credit letter(s) from banks</li> <li>• Financial audited accounts for two (2) previous year endorsed, signed and stamped by a registered external auditor.</li> <li>• Copies of Academic/ Professional Certificates</li> <li>• Copies of Assets Ownership documents eg. Log books, Lease agreements, Titles, etc</li> </ul> <p><b><i>AT THIS STAGE, THE TENDERER'S SUBMISSION WILL EITHER BE RESPONSIVE OR NON RESPONSIVE. THE NON RESPONSIVE SUBMISSIONS WILL BE ELIMINATED FROM THE ENTIRE EVALUATION PROCESS AND WILL NOT BE CONSIDERED FURTHER.</i></b></p>
2.24	<p><b>Evaluation and Comparison of Tenders (Technical Evaluation)</b></p> <ul style="list-style-type: none"> <li>• Shall be as per evaluation criteria provided below.</li> <li>• All tender responses will be evaluated, and the winning tender selected on the basis of "best value" in terms of technical superiority as well as cost effectiveness.</li> <li>• A tenderer must score a minimum of 70% to be considered for price comparison.</li> </ul>
2.27	<p>Post – qualification: <b>Shall be undertaken</b></p>
2.24.3	<p>Award Criteria: <b>The highest combined technically and financially evaluated bidder</b></p>
2.30.1	<p>Particulars of performance security if applicable.- <b>10% of the contract sum from a reputable financial institution</b></p>

## EVALUATION PROCESS / EVALUATION CRITERIA

### STAGE 1. PRELIMINARY REQUIREMENTS

1. All entries must be typed or written in ink. Mistakes must not be erased but should be crossed out and corrections made and initialed by the persons signing the tender.
2. The Form of Bid **shall** be duly filled, signed and stamped by an individual entrusted with the powers of attorney.
3. The bidder shall provide **1 ORIGINAL copy** of the bid document and **2 other COPIES** and be marked as original or copy and placed in one envelope. Each bid should be submitted in a plain sealed envelope with the Tender Number and description endorsed on the outside.
4. The bidder shall attach a duly filled, signed and stamped confidential business questionnaire by an individual entrusted with the powers of attorney.
5. The Form of power of attorney shall be duly filled, signed and stamped.
6. Tenderers shall ensure that the submitted bid documents are duly serialized/paginated on each page, well bound and intact.
7. All submitted forms and documents shall be duly filled, signed (where applicable) and stamped.

***Bidders shall attach copies of the under listed documents and Must be certified (signed and stamped) by commissioner of oaths/advocate registered in Kenya:***

8. Valid current year business permit.
9. Valid current Tax Compliance Certificate.
10. Certificate of incorporation.
11. CR 12 Certificate/ Form
12. NCA road works-category 6 and above.
13. PIN/VAT certificate from KRA
14. Bank statements for the last One year
15. Lines of credit letter(s) from banks
16. Financial audited accounts for two (2) previous year endorsed, signed and stamped by a registered external auditor.
17. Copies of Academic/ Professional Certificates
18. Copies of Assets Ownership documents eg. Log books, Lease agreements, Titles, etc

**Bidders that will not comply with the above criteria shall be considered non-responsive at this point and disqualified from further evaluation.**

## STAGE 2. TECHNICAL EVALUATION

<b>2. TECHNICAL EVALUATION</b>		
<b>CRITERIA</b>	<b>DESCRIPTION</b>	<b>MAX SCORE %</b>
<b>(A) LEGAL CAPACITY</b>		
<b>Legal Capacity</b>	1. History of Non-Performing Contracts	2.5
	2. Pending Litigation	2.5
<b>TOTAL (Legal Capacity)</b>		<b>5.00</b>
<b>(B) FINANCIAL PERFORMANCE</b>		
<b>Financial performances</b>	<b>Submission of Audited Financial reports for the last two [2years, Certified Bank statements and lines of credit, etc to demonstrate:</b>	
	(a) the current soundness of the applicants financial position and its prospective long term profitability - last two (2) years audited reports	5.00
	(b) Evidence of adequacy of working capital:- Last 12 Months certified Bank statements or Letter from the bank confirming availability of adequate funds to perform the contract (minimum Kshs 10 million). (5% for bank statements, 10% for Ksh10-15 million, 15% for above Ksh15 million).	15.00
<b>TOTAL (Financial performance)</b>		<b>20.00</b>
<b>(C) CONSTRUCTION EXPERIENCE</b>		
<b>Construction experience</b>	<b>(A) General Construction Experience</b>	
	Experience under construction contracts in the role of contractor, subcontractor, or management contractor for at least the last 5 years prior to the applications submission deadline. Provide list showing project name, contract period, contract sum, commencement date, completion date, and percentage currently.	10.00
	<b>(B) Specific Construction Experience</b>	
	Experience as roads contractor, management contractor or subcontractor, in at least three (3) public (government) contracts within the last Five (5) years, each with a value of at least Kshs. 5,000,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods/ technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates	15.00
	<b>(C) Work methodology</b>	
	Methodology for implementing of works (Submit proposals of works methods and schedule in sufficient detail to demonstrate the adequacy of the bidders' proposals to meet the technical specifications	5.00

	and the completion time referred to in Clause 1.2 above.	
<b>TOTAL (Construction experience)</b>		<b>30.00</b>
<b>(D) Construction Equipment Capacity</b>		
<b>Essential Equipment Availability</b>	<b>Proof of essential roads construction equipment ownership or proposal for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc</b>	
	Site equipment: Earthmoving, Compactors, Excavators etc (3Mks each up to a maximum of 5 equipment)	15.00
	Transport equipment: Tippers, dumpers, water tankers etc (2Mks each up-to 3 equipment)	6.00
<b>TOTAL (Construction Equipment Capacity)</b>		<b>20.00</b>
<b>CRITERIA</b>	<b>DESCRIPTION</b>	<b>MAX SCORE %</b>
<b>(E) KEY PERSONNEL</b>		
<b>Key Personnel competences</b>	Qualification and experience of key personnel. Attach certified copies of C.Vs and certificates).	
	(i) Construction/Project Manager (the overall in charge person(s) to be assigned for the site) with at least five years' experience in works of an equivalent nature and volume. Minimum Degree in Business or Engineering related field, Degree – 5mks; 5Years – 5nm Mks ;5 Years & above -10Mks	10.00
	(ii) Site Agent with at least five years' experience in works of an equivalent nature and volume. Minimum Diploma in Building Construction Diploma 3Mks; 5 Years -5Mks; 5 Years & above -7Mks)	10.00
	(iii) Site surveyor with at least five years' experience in works of an equivalent nature and volume. Minimum Certificate in Roads Construction with NCA accreditation. Certificate 2Mks; 5 Years -2Mks; 5 Years & above -3Mks)	5.00
	(iv) Foreman with at least five years' experience in works of an equivalent nature and volume. Minimum Certificate in Roads Construction with NCA accreditation. Certificate 2Mks; 5 Years -2Mks; 5 Years & above -3Mks)	5.00
<b>TOTAL (key personnel)</b>		<b>25.00</b>
<b>GRAND TOTAL</b>	<b>(Totals for; A, B, C, D, &amp; E)</b>	<b>100.00</b>

In addition to the mandatory requirements above, a minimum technical score of 70% shall be required to proceed to evaluation of the financial bids.

### **STAGE 3. FINANCIAL EVALUATION**

The winning bidder will be the lowest bidder among those who will have passed the technical evaluation as outlined in (1 & 2) above except where the bidder has not satisfied all other requirements stated in the bid document. The financial evaluation will include:

#### **(1) Arithmetic Errors**

The bid shall be checked for arithmetic errors based on the rates and the total sums indicated in the bills of quantities. Confirmation shall be sought in writing from the tenderers whose tender sums will be determined to have a significant arithmetic error to their disadvantage, to confirm whether they stand by their tender sums. Discount if any shall be treated as an error.

#### **(2) Comparison of rates**

The evaluation committee will compare rates from different bidders and note consistency of rates and front loading. The evaluation committee will judge and make an appropriate decision giving evidence.

#### **Summary of Evaluation and Comparison of Tenders**

The following evaluation criteria shall be applied notwithstanding any other requirement in the tender documents.

##### Selection Process

Quality Cost Based Selection

#### **STEP 1: Preliminary evaluation**

This will be an elimination stage which will be done as per criteria above

#### **STEP 2: Technical Evaluation**

Tenderers will be required to provide technical details on their product that meets the provided technical requirement. Only Tenderers who score 70% and above will be considered to be technically responsive and therefore be considered for further evaluation

- **Technical Evaluation Shall be based as per the evaluation criteria provided above**

Only bidders who score 70% and above will be subjected to financial evaluation. Those who score below 70% will be eliminated at this stage from the entire evaluation process and will not be considered further.

#### **STEP 3: Financial Evaluation**

The financial submissions of the required services will be divided by the lowest bidder's financial quote to determine the financial score of each bidder using the formulae below:

**$S_f = 100 \times \frac{F_m}{F}$**  where:  $S_f$  is the financial score;  $F_m$  is the lowest priced financial proposal and  $F$  is the price of the proposal under consideration.

Proposals will be ranked according to their combined technical ( $S_t$ ) and financial ( $S_f$ ) scores using the weights ( **$T$ =the weight given to the Technical Proposal as 80%:  $P$  = the weight given to the Financial Proposal as 20%**)

**Combined Technical and Financial scores is: :-  $S = S_t \times T\% + S_f \times P\%$**

Proposals will be ranked according to their combined technical ( $S_t$ ) and financial ( $S_f$ ) scores using the weights ( $T$ =the weight given to the Technical Proposal:  $P$  = the weight given to the Financial Proposal;  $T + p = 1$ )

**The table below summarises the overall evaluation process and the proposed weighting of each stage.**

AREA RATING	RATING/SCORE
STEP 1: Preliminary evaluation	Elimination
STEP 2: Technical Evaluation	80
STEP 3: Financial Evaluation	20
Combined Technical and Financial Score	100

## **STAGE 5 - POST-QUALIFICATION**

An evaluation committee may, after tender evaluation, but prior to the award of the tender, conduct due diligence and present the report in writing to confirm and verify the qualifications of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with this Act.

The conduct of due diligence may include obtaining confidential references from persons with whom the tenderer has had prior engagement.

To acknowledge that the report is a true reflection of the proceedings held, each member who was part of the due diligence by the evaluation committee shall-

- (a) initial each page of the report; and
- (b) append his or her signature as well as their full name and designation.

**SECTION IV: CONDITIONS OF CONTRACT**

**Table of Contents**

1 Definitions .....

2 Interpretation.....

3 Language and Law .....

4 Project Manager’s Decisions.....

5 Delegation.....

6 Communications .....

7 Sub Contracting .....

8 Other Contractors .....

9 Personnel .....

10 Works.....

11 Safety and temporary works .....

12 Discoveries .....

13 Work Programme .....

14 Possession of site .....

15 Access to site .....

16 Instructions .....

17 Extension or Acceleration of completion date .....

18 Management Meetings .....

19 Early Warning .....

20 Defects .....

21 Bills of Quantities .....

22 Variations .....

23 Payment certificates, currency of payments and  
Advance Payments .....

24 Compensation events .....

25 Price Adjustment .....

26 Retention .....

27 Liquidated Damages.....

28 Securities .....

29 Day Works .....

30 Liability and Insurance .....

31 Completion and taking over .....

32 Final Account .....

33 Termination .....

34 Payment upon termination .....

35 Release from performance .....

36 Corrupt gifts and payments of commission .....

37 Settlement of Disputes .....



## **CONDITIONS OF CONTRACT**

### **1. Definitions**

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

**“Bill of Quantities”** means the priced and completed Bill of Quantities forming part of the tender.

**“Compensation Events”** are those defined in Clause 24 hereunder.

**“The Completion Date”** means the date of completion of the Works as certified by the Project Manager, in accordance with Clause 31.

**“The Contract”** means the agreement entered into between the Employer and the Contractor as recorded in the Agreement Form and signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein to execute, complete, and maintain the Works,

**“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 and thereafter as adjusted in accordance with the provisions of the Contract.

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

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

**“The Defects Liability Certificate”** is the certificate issued by Project Manager upon correction of defects by the Contractor.

**“The Defects Liability Period”** is the period named in the Contract Data and calculated from the Completion Date.

**“Drawings”** include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

**“Day-works”** are Work inputs subject to payment on a time basis for labour and the associated materials and plant.

**“Employer”**, or the **“Procuring entity”** as defined in the Public Procurement Regulations (i.e. Central or Local Government

administration, Universities, Public Institutions and Corporations, etc) 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.

**“The Intended Completion Date”** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

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

**“Plant”** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

**“Project Manager”** is the person named in the Appendix to Conditions of Contract (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract and shall be an “Architect” or a “Quantity Surveyor” registered under the Architects and Quantity Surveyors Act Cap 525 or an “Engineer” registered under Engineers Registration Act Cap 530.

**“Site”** is the area defined as such in the Appendix to Condition of Contract.

**“Site Investigation Reports”** are those reports that may be included in the tendering documents which are factual and interpretative about the surface and subsurface conditions at the Site.

**“Specifications”** means the Specifications of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

**“Start Date”** is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with the Site possession date(s).

**“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 Project Manager which varies the Works.

**“The Works”** are what the Contract requires the Contractor to construct, install, and turnover to the Employer, as defined in the Appendix to Conditions of Contract.

## **2. Interpretation**

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning in English Language unless specifically defined. The Project Manager will provide instructions clarifying queries about these Conditions of Contract.

2.2 If sectional completion is specified in the Appendix to Conditions of Contract, reference in the Conditions of Contract to the Works, the Completion Date and the Intended Completion Date apply to any section of the Works (other than references to the Intended Completion Date for the whole of the Works).

2.3 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) Appendix to Conditions of Contract,
- (5) Conditions of Contract,
- (6) Specifications,
- (7) Drawings,
- (8) Bill of Quantities,
- (9) Any other documents listed in the Appendix to Conditions of Contract as forming part of the Contract.

Immediately after the execution of the Contract, the Project Manager shall furnish both the Employer and the Contractor with two copies each of all the Contract documents. Further, as and when necessary the Project Manager shall furnish the Contractor [always with a copy to the Employer] with three [3] copies of such further drawings or details or descriptive schedules as are reasonably necessary either to explain or amplify the Contract drawings or to enable the Contractor to carry out and complete the Works in accordance with these Conditions.

## **3. Language and Law**

3.1 Language of the Contract and the law governing the Contract shall be English language and the Laws of Kenya respectively unless otherwise stated.

## **4 Project Manager's Decisions**

- 4.1 Except where otherwise specifically stated, the Project Manager will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

## **5 Delegation**

- 5.1 The Project Manager may delegate any of his duties and responsibilities to others after notifying the Contractor.

## **6 Communications**

- 6.1 Communication between parties shall be effective only when in writing. A notice shall be effective only when it is delivered.

## **7 Subcontracting**

- 7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.

## **8 Other Contractors**

- 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities etc. as listed in the Appendix to Conditions of Contract and also with the Employer, as per the directions of the Project Manager. The Contractor shall also provide facilities and services for them. The Employer may modify the said List of Other Contractors etc., and shall notify the Contractor of any such modification.

## **9 Personnel**

- 9.1 The Contractor shall employ the key personnel named in the Qualification Information, to carry out the functions stated in the said Information or other personnel approved by the Project Manager. The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Qualification Information. If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Work in the Contract.

## **10 Works**

- 10.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

## **11 Safety and Temporary Works**

- 11.1 The Contractor shall be responsible for the design of temporary works. However before erecting the same, he shall submit his designs including specifications and drawings to the Project Manager and to any other relevant third parties for their approval. No erection of temporary works shall be done until such approvals are obtained.
- 11.2 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary works and all drawings prepared by the Contractor for the execution of the temporary or permanent Works, shall be subject to prior approval by the Project Manager before they can be used.
- 11.3 The Contractor shall be responsible for the safety of all activities on the Site.

## **12. Discoveries**

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

## **13. Work Program**

- 13.1 Within the time stated in the Appendix to Conditions of Contract, the Contractor shall submit to the Project Manager for approval a program showing the general methods, arrangements, order, and timing for all the activities in the Works. An update of the program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Work, including any changes to the sequence of the activities.
- 13.2 The Contractor shall submit to the Project Manager for approval an updated program at intervals no longer than the period stated in the Appendix to Conditions of Contract.
- 13.3 If the Contractor does not submit an updated program within this period, the Project Manager may withhold the amount stated in the said Appendix from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted. The Project Manager's approval of the

program shall not alter the Contractor's obligations. The Contractor may revise the program and submit it to the Project Manager again at any time. A revised program shall show the effect of Variations and Compensation Events.

#### **14. Possession of Site**

14.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Appendix to Conditions of Contract, the Employer will be deemed to have delayed the start of the relevant activities, and this will be a Compensation Event.

#### **15. Access to Site**

15.1 The Contractor shall allow the Project Manager and any other person authorised by the Project Manager, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

#### **16. Instructions**

16.1 The Contractor shall carry out all instructions of the Project Manager which are in accordance with the Contract.

#### **17. Extension or Acceleration of Completion Date**

17.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a variation is issued which makes it impossible for completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining Work, which would cause the Contractor to incur additional cost. The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager in writing for a decision upon the effect of a Compensation Event or variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay caused by such failure shall not be considered in assessing the new (extended) Completion Date.

17.2 No bonus for early completion of the Works shall be paid to the Contractor by the Employer.

#### **18. Management Meetings**

18.1 A Contract management meeting shall be held monthly and attended by the Project Manager and the Contractor. Its business shall be to review the plans for the remaining Work and to deal with matters raised in accordance with the early warning procedure. The Project Manager

shall record the minutes of management meetings and provide copies of the same to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

## **19. Early Warning**

- 19.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the Work, increase the Contract Price or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 19.2 The Contractor shall cooperate with the Project Manager in making and considering proposals on how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the Work and in carrying out any resulting instructions of the Project Manager.

## **20. Defects**

- 20.1 The Project Manager 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 Project Manager may instruct the Contractor to search for a defect and to uncover and test any Work that the Project Manager considers may have a defect. 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.
- 20.2 The Project Manager 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. The Defects Liability Period shall be extended for as long as defects remain to be corrected.
- 20.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Project Manager's notice. If the Contractor has not corrected a defect within the time specified in the Project Manager's notice, the Project Manager 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.

## **21. Bills of Quantities**

- 21.1 The Bills of Quantities 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 rate in the Bills of Quantities for each item.
- 21.2 If the final quantity of the Work done differs from the quantity in the Bills of Quantities for the particular item by more than 25 percent and provided the change exceeds 1 percent of the Initial Contract price, the Project Manager shall adjust the rate to allow for the change.
- 21.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bills of Quantities.

## **22. Variations**

- 22.1 All variations shall be included in updated programs produced by the Contractor and shall be guided by the Public Procurement and Disposal Act 2015, Sec 139 .
- 22.2 The Contractor shall provide the Project Manager with a quotation for carrying out the variations when requested to do so. The Project Manager shall assess the quotation, which shall be given within seven days of the request or within any longer period as may be stated by the Project Manager and before the Variation is ordered.
- 22.3 If the work in the variation corresponds with an item description in the Bills of Quantities and if in the opinion of the Project Manager, the quantity of work is not above the limit stated in Clause 21.2 or the timing of its execution does not cause the cost per unit of quantity to change, the rate in the Bills of Quantities shall be used to calculate the value of the variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the variation does not correspond with items in the Bills of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.
- 22.4 If the Contractor's quotation is unreasonable, the Project Manager may order the variation and make a change to the Contract price, which shall be based on the Project Manager's own forecast of the effects of the variation on the Contractor's costs.
- 22.5 If the Project Manager decides that the urgency of varying the Work would prevent a quotation being given and considered without delaying the Work, no quotation shall be given and the variation shall be treated as a Compensation Event.
- 22.6 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.



22.7 When the Program is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast.

### **23. Payment Certificates, Currency of Payments and Advance Payments**

- 23.1 The Contractor shall submit to the Project Manager monthly applications for payment giving sufficient details of the Work done and materials on Site and the amounts which the Contractor considers himself to be entitled to. The Project Manager shall check the monthly application and certify the amount to be paid to the Contractor within 14 days. The value of Work executed and payable shall be determined by the Project Manager.
- 23.2 The value of Work executed shall comprise the value of the quantities of the items in the Bills of Quantities completed, materials delivered on Site, variations and compensation events. Such materials shall become the property of the Employer once the Employer has paid the Contractor for their value. Thereafter, they shall not be removed from Site without the Project Manager's instructions except for use upon the Works.
- 23.3 Payments shall be adjusted for deductions for retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of issue of each certificate. If the Employer makes a late payment, the Contractor shall be paid simple interest on the late payment in the next payment. Interest shall be calculated on the basis of number of days delayed at a rate three percentage points above the Central Bank of Kenya's average rate for base lending prevailing as of the first day the payment becomes overdue.
- 23.4 If an amount certified is increased in a later certificate or as a result of an award by an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 23.5 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 23.6 The Contract Price shall be stated in Kenya Shillings. All payments to the Contractor shall be made in Kenya Shillings and foreign currency in the proportion indicated in the tender, or agreed prior to the execution of the Contract Agreement and indicated therein. The rate of exchange for the calculation of the amount of foreign currency payment shall be the rate of exchange indicated in the Appendix to Conditions of Contract. If the Contractor indicated foreign currencies for payment other than the currencies of the countries of origin of related goods and services, the Employer reserves the right to pay the equivalent at the

time of payment in the currencies of the countries of such goods and services. The Employer and the Project Manager shall be notified promptly by the Contractor of any changes in the expected foreign currency requirements of the Contractor during the execution of the Works as indicated in the Schedule of Foreign Currency Requirements and the foreign and local currency portions of the balance of the Contract Price shall then be amended by agreement between Employer and the Contractor in order to reflect appropriately such changes.

23.7 In the event that an advance payment is granted, the following shall apply: -

- a) On signature of the Contract, the Contractor shall at his request, and without furnishing proof of expenditure, be entitled to an advance of 10% (ten percent) of the original amount of the Contract. The advance shall not be subject to retention money.
- b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.
- c) Reimbursement of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the Contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the Contract. It shall have been completed by the time 80% of this amount is reached.

The amount to be repaid by way of successive deductions shall be calculated by means of the formula:

$$R = \frac{A(x^1 - x^{11})}{80 - 20}$$

Where:

R = the amount to be reimbursed

A = the amount of the advance which has been

granted

X<sup>1</sup> = the amount of proposed cumulative payments as a percentage of the original amount of the Contract. This figure will exceed 20% but not exceed 80%.

X<sup>11</sup> = the amount of the previous cumulative payments as a percentage of the original amount of the

Contract. This figure will be below 80%but not less than 20%.

- d) with each reimbursement the counterpart of the directly liable guarantee may be reduced accordingly.

## **24. Compensation Events**

24.1 The following issues shall constitute Compensation Events:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Appendix to Conditions of Contract.
- (b) The Employer modifies the List of Other Contractors, etc., in a way that affects the Work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue drawings, specifications or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon the Work, which is then found to have no defects.
- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to tenderers (including the Site investigation reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The effects on the Contractor of any of the Employer's risks.
- (j) The Project Manager unreasonably delays issuing a Certificate of Completion.
- (k) Other compensation events described in the Contract or determined by the Project Manager shall apply.

- 24.2 If a compensation event would cause additional cost or would prevent the Work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 24.3 As soon as information demonstrating the effect of each compensation event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager will assume that the Contractor will react competently and promptly to the event.
- 24.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having co-operated with the Project Manager.
- 24.5 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the Appendix to Conditions of Contract.
- 24.6 The Contractor shall give written notice to the Project Manager of his intention to make a claim within thirty days after the event giving rise to the claim has first arisen. The claim shall be submitted within thirty days thereafter.

Provided always that should the event giving rise to the claim of continuing effect, the Contractor shall submit an interim claim within the said thirty days and a final claim within thirty days of the end of the event giving rise to the claim.

## **25. Price Adjustment**

- 25.1 The Project Manager shall adjust the Contract Price if taxes, duties and other levies are changed between the date 30 days before the submission of tenders for the Contract and the date of Completion. The adjustment shall be the change in the amount of tax payable by the Contractor.
- 25.2 The Contract Price shall be deemed to be based on exchange rates current at the date of tender submission in calculating the cost to the Contractor of materials to be specifically imported (by express provisions in the Contract Bills of Quantities or Specifications) for permanent incorporation in the Works. Unless otherwise stated in the Contract, if at any time during the period of the Contract exchange rates shall be varied and this shall affect the cost to the Contractor of

such materials, then the Project Manager shall assess the net difference in the cost of such materials. Any amount from time to time so assessed shall be added to or deducted from the Contract Price, as the case may be.

25.3 Unless otherwise stated in the Contract, the Contract Price shall be deemed to have been calculated in the manner set out below and in sub-clauses 25.4 and 25.5 and shall be subject to adjustment in the events specified thereunder;

- (i) The prices contained in the Contract Bills of Quantities shall be deemed to be based upon the rates of wages and other emoluments and expenses as determined by the Joint Building Council of Kenya (J.B.C.) and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.
- (ii) Upon J.B.C. determining that any of the said rates of wages or other emoluments and expenses are increased or decreased, then the Contract Price shall be increased or decreased by the amount assessed by the Project Manager based upon the difference, expressed as a percentage, between the rate set out in the schedule of basic rates issued 30 days before the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of labour incorporated within the amount of Work remaining to be executed at the date of publication of such increase or decrease.
- (iii) No adjustment shall be made in respect of changes in the rates of wages and other emoluments and expenses which occur after the date of Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.

25.4 The prices contained in the Contract Bills of Quantities shall be deemed to be based upon the basic prices of materials to be permanently incorporated in the Works as determined by the J.B.C. and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.

25.5 Upon the J.B.C. determining that any of the said basic prices are increased or decreased then the Contract Price shall be increased or decreased by the amount to be assessed by the Project Manager based upon the difference between the price set out in the schedule of basic rates issued 30 days before the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of the relevant materials which have not been taken into account in arriving at

the amount of any interim certificate under clause 23 of these Conditions issued before the date of publication of such increase or decrease.

- 25.6 No adjustment shall be made in respect of changes in basic prices of materials which occur after the date for Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.
- 25.7 The provisions of sub-clause 25.1 to 25.2 herein shall not apply in respect of any materials included in the schedule of basic rates.

## **26. Retention**

- 26.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Appendix to Conditions of Contract until Completion of the whole of the Works. On Completion of the whole of the Works, half the total amount retained shall be repaid to the Contractor and the remaining half when the Defects Liability Period has passed and the Project Manager has certified that all defects notified to the Contractor before the end of this period have been corrected.

## **27. Liquidated Damages**

- 27.1 The Contractor shall pay liquidated damages to the Employer at the rate stated in the Appendix to Conditions of Contract for each day that the actual Completion Date is later than the Intended Completion Date. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not alter the Contractor's liabilities.
- 27.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rate specified in Clause 23.30.

## **28. Securities**

- 28.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a reputable bank acceptable to the Employer, and denominated in Kenya Shillings. The Performance Security shall be valid until a date 30 days beyond the date of issue of the Certificate of Completion.

## **29. Day-works**

- 29.1 If applicable, the Day-works rates in the Contractor's tender shall be used for small additional amounts of Work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 29.2 All work to be paid for as Day-works shall be recorded by the Contractor on Forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the Work being done.
- 29.3 The Contractor shall be paid for Day-works subject to obtaining signed Day-works forms.

### **30. Liability and Insurance**

- 30.1 From the Start Date until the Defects Correction Certificate has been issued, the following are the Employer's risks:
- (a) The risk of personal injury, death or loss of or damage to property (excluding the Works, Plant, Materials and Equipment), which are due to;
    - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works, or
    - (ii) negligence, breach of statutory duty or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
  - (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in Employer's design, or due to war or radioactive contamination directly affecting the place where the Works are being executed.
- 30.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is the Employer's risk except loss or damage due to;
- (a) a defect which existed on or before the Completion Date.
  - (b) an event occurring before the Completion Date, which was not itself the Employer's risk
  - (c) the activities of the Contractor on the Site after the Completion Date.
- 30.3 From the Start Date until the Defects Correction Certificate has been issued, the risks of personal injury, death and loss of or damage to

property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risk are Contractor's risks.

- 30.4 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts stated in the Appendix to Conditions of Contract for the following events;
- (a) loss of or damage to the Works, Plant, and Materials;
  - (b) loss of or damage to Equipment;
  - (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract, and
  - (d) personal injury or death.
- 30.5 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation required to rectify the loss or damage incurred.
- 30.6 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 30.7 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager. Both parties shall comply with any conditions of insurance policies.

### **31. Completion and taking over**

- 31.1 Upon deciding that the Works are complete, the Contractor shall issue a written request to the Project Manager to issue a Certificate of Completion of the Works. The Employer shall take over the Site and the Works within seven [7] days of the Project Manager's issuing a Certificate of Completion.

### **32. Final Account**

- 32.1 The Contractor shall issue the Project Manager with a detailed account of the total amount that the Contractor considers payable to him by the Employer under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects 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 Project Manager shall issue within 30 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 Project Manager shall decide on the amount payable to the Contractor and issue a Payment Certificate. The Employer shall pay the Contractor the amount due in the Final Certificate within 60 days.



### **33. Termination**

- 33.1 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 when no stoppage of work is shown on the current program and the stoppage has not been authorised by the Project Manager;
  - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
  - (c) the Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
  - (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 30 days (for Interim Certificate) or 60 days (for Final Certificate) of issue.
  - (e) the Project Manager gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
  - (f) the Contractor does not maintain a security, which is required.
- 33.2 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under Clause 33.1 above, the Project Manager shall decide whether the breach is fundamental or not.
- 33.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 33.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible. The Project Manager 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.

### **34. Payment Upon Termination**

- 34.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the Work done and materials ordered and

delivered to Site up to the date of the issue of the certificate. Additional liquidated damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable by the Contractor.

34.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the Work done, materials ordered, the reasonable cost of removal of equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works.

34.3 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 the Site, plant, equipment and temporary works.

34.4 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 Project Manager may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to or hired by him, and in default the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.

Until after completion of the Works under this clause the Employer 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 therefore the Project Manager 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.

### **35. Release from Performance**

35.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop Work as quickly as possible after receiving this certificate and shall be paid for all Work carried out before receiving it.

### **36. Corrupt gifts and payments of commission**

The Contractor shall not;

- (a) Offer or give or agree to give to any person in the service of the Employer any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for the Employer or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract for the Employer.
- (b) Enter into this or any other contract with the Employer in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the Employer.

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 provisions of the Public Procurement Regulations issued under The Exchequer and Audit Act Cap 412 of the Laws of Kenya.

### **37. Settlement of Disputes**

37.1 In case any dispute or difference shall arise between the Employer or the Project Manager on his behalf and the Contractor, either during the progress or after the completion or termination of the Works, such dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred 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 or Vice Chairman of any of the following professional institutions;

- (i) Architectural Association of Kenya
- (ii) Institute of Quantity Surveyors of Kenya
- (iii) Association of Consulting Engineers of Kenya
- (iv) Chartered Institute of Arbitrators (Kenya Branch)
- (v) Institution of Engineers of Kenya

On the request of the applying party. The institution written to first by the aggrieved party shall take precedence over all other institutions.

- 37.2 The arbitration may be on the construction of this Contract or on any matter or thing of whatsoever nature arising thereunder or in connection therewith, including any matter or thing left by this Contract to the discretion of the Project Manager, or the withholding by the Project Manager of any certificate to which the Contractor may claim to be entitled to or the measurement and valuation referred to in clause 23.0 of these conditions, or the rights and liabilities of the parties subsequent to the termination of Contract.
- 37.3 Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
- 37.4 Notwithstanding the issue of a notice as stated above, the arbitration of such a dispute or difference shall not commence unless an attempt has in the first instance been made by the parties to settle such dispute or difference amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 37.5 Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:
- 37.5.1 The appointment of a replacement Project Manager upon the said person ceasing to act.
- 37.5.2 Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
- 37.5.3 Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
- 37.5.4 Any dispute or difference arising in respect of war risks or war damage.
- 37.6 All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless the Employer and the Contractor agree otherwise in writing.
- 37.7 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.
- 37.8 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion,

decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.

37.9 The award of such Arbitrator shall be final and binding upon the parties.

**SECTION IV: APPENDIX TO CONDITIONS OF CONTRACT**

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

<b>COC Clause Number</b>	<b>Amendments of, and Supplements to, Clauses in the conditions of contract</b>
1	<p><b>Definitions:</b></p> <p>The Employer is:</p> <p>Name: <b>COUNTY GOVERNMENT OF KIRINYAGA</b>  Address: <b>P.O BOX 260 -10304, KUTUS</b>  Name of Authorized Representative: <b>CHIEF OFFICER, COUNTY DEPARTMENT OF TRANSPORT, ROADS AND PUBLIC WORKS, KIRINYAGA COUNTY.</b>  Telephone:  Email:</p> <p>The Project Manager is:</p> <p>Name: <b>DIRECTOR OF ROADS, COUNTY DEPARTMENT OF TRANSPORT, ROADS AND PUBLIC WORKS, KIRINYAGA COUNTY.</b>  Address: <b>P.O BOX 390 KERUGOYA</b>  Telephone: <b>020 215 3369/ 0789 218 976</b>  Email: <a href="mailto:kirinyagacountyworks@gmail.com"><u>kirinyagacountyworks@gmail.com</u></a></p> <p>The name (and identification number) of the Contract is:</p> <p><b>THE PROPOSED CONSTRUCTION OF KAGIO MATATU PARKING PHASE II SECTORS 6, 7, 8 &amp; 9 IN KIINE WARD</b></p> <p>The Start Date:</p> <p>Shall be <b>AGREED WITH THE PROJECT MANAGER</b></p>
2.1	The Completion Period for the Works is: <b>15 WEEKS</b>
13.1	The Contractor shall submit a revised program for the Works within 7 days of delivery of the Letter of Acceptance.
13.2	The period between Program updates is <b>30 days.</b>
13.3	The amount to be withheld for late submission of an updated Program is <b>Kshs “Full Certificate”</b>

14.1	The Site Possession Date shall be <b>AGREED WITH THE PROJECT MANAGER</b>
15.1	The Site is located at <b>KAGIO MARKET ON MUTITHI WARD, KIRINYAGA COUNTY</b>
20.2	The Defects Liability period is <b>180</b> days from the date of Practical Completion.
25.4	The Price Adjustment Clause <b>SHALL NOT</b> apply
26.1	The proportion of payments retained is <b>10%</b> . Limit of retention is <b>10%</b> of contract sum.
27.1	The liquidated damages for the whole of the Works is Kshs. <b>0.05%</b> of the Contract Sum per day
28.1	The Performance Security shall be for the following minimum amounts equivalent as a percentage of the Contract Price <b>10</b> percent (%)
30.4	The minimum insurance covers shall be; <ul style="list-style-type: none"> <li>• Contractor's <b>ALL RISK INSURANCE</b></li> </ul> <ol style="list-style-type: none"> <li>1. The minimum cover for insurance of the Works and of Plant and Materials in respect of contractor's faulty design is <b>N/A</b></li> <li>2. The minimum cover for loss or damage to Equipment is <b>N/A</b></li> <li>3. The minimum for insurance of other property is <b>N/A</b></li> <li>4. The minimum cover for personal injury or death insurance <ul style="list-style-type: none"> <li>• For the Contractor's employees is Kshs 10,000,000 (Ten Million)</li> <li>• And for other people is Kshs 10,000,000 (Ten Million)</li> </ul> </li> </ol>
2.14.1	The Tender Security shall be; <b>Bid Security of Kshs 500,000.00</b> from a reputable bank or insurance firm approved by PPRA in the format provided valid for an <b>additional 30 days</b> beyond the tender validity period
2.15.1	The Tender validity period shall be <b>120 days</b> .
2.16.2	The number of copies of the Tender to be completed and returned shall be: <b>One (1) original and two (2) copies</b> .
2.17.2	<b>Tender shall be submitted to:</b>  <b>The Head Supply Chain Management,</b>

	<b>County Government of Kirinyaga, P.O. Box 260 – 10304, Kutus.</b>
2.20.1	<b>The Tender opening shall take place at:</b>  Kirinyaga County Headquarters, 3 <sup>rd</sup> floor, Conference Room. Date: <b>Friday 2nd November, 2018</b> Time: <i>11.00am local time.</i>
2.22	The Preliminary evaluation shall be mandatory:  The evaluation shall adopt <i>YES/ No Approach</i> . The non-responsive submissions will be eliminated from the entire preliminary evaluation process and will not be considered further.  Bidders must submit the following documents and Must be certified (signed and stamped) by commissioner of oaths/advocate registered in Kenya:  <ul style="list-style-type: none"> <li>• Valid current year business permit.</li> <li>• Valid current Tax Compliance Certificate.</li> <li>• Certificate of incorporation.</li> <li>• CR 12 Certificate/ Form</li> <li>• NCA road works-category 6 and above.</li> <li>• PIN/VAT certificate from KRA</li> <li>• Bank statements for the last One year</li> <li>• Lines of credit letter(s) from banks</li> <li>• Financial audited accounts for two (2) previous year endorsed, signed and stamped by a registered external auditor.</li> <li>• Copies of Academic/ Professional Certificates</li> <li>• Copies of Assets Ownership documents eg. Log books, Lease agreements, Titles, etc</li> </ul> <p><b><i>AT THIS STAGE, THE TENDERER'S SUBMISSION WILL EITHER BE RESPONSIVE OR NON RESPONSIVE. THE NON RESPONSIVE SUBMISSIONS WILL BE ELIMINATED FROM THE ENTIRE EVALUATION PROCESS AND WILL NOT BE CONSIDERED FURTHER.</i></b></p>
2.24	<b>Evaluation and Comparison of Tenders (Technical Evaluation)</b> <ul style="list-style-type: none"> <li>• Shall be as per evaluation criteria provided below.</li> <li>• All tender responses will be evaluated, and the winning tender selected on the basis of “best value” in terms of technical superiority as well as cost effectiveness.</li> <li>• A tenderer must score a minimum of 70% to be considered for price comparison.</li> </ul>
2.27	Post – qualification: <b>Shall be undertaken</b>
2.24.3	Award Criteria: <b>The combined technically and financially evaluated bidder</b>
2.30.1	Particulars of performance security if applicable.- <b>10% of the</b>



## **SECTION VI - STANDARD FORMS**

### **Contents**

Form of Power of Attorney .....	50
Form of Tender.....	51
Letter of Notification of Award .....	53
Letter of Acceptance .....	54
Contract Agreement .....	55
Confidential Business Questionnaire.....	56
Form Sd1 .....	57
Form Sd2 .....	58
Tender Security (Bank Guarantee).....	59
Performance Security Form .....	60
Insurance Authorization Form .....	61
Form Rb 1 .....	63
Tender Questionnaire.....	64
Tender Securing Declaration Form.....	<b>68</b>

**FORM OF POWER OF ATTORNEY**

**(All bidders shall complete this form otherwise; their bids shall be considered as non-responsive)**

We \_\_\_\_\_ (Name of Bidder)

having our offices located in \_\_\_\_\_ (Name of Town and Building) duly authorise

\_\_\_\_\_ (Name of person appointed to act for and on behalf of the bidder) to act for and on our behalf on all matters pertaining to the execution of works as stipulated under

**Tender No** .....

**TENDER Description:** .....

Duly signed and delivered:

Name of appointed attorney: \_\_\_\_\_

Signature of appointed attorney: \_\_\_\_\_

Witnessed by:

1. Name of First Company Director: \_\_\_\_\_

Signature: \_\_\_\_\_

2. Name of Second Company Director: \_\_\_\_\_

Signature: \_\_\_\_\_

Company Seal:

\_\_\_\_\_

\_\_\_\_\_  
Name and Title

**FORM OF TENDER**

Office of the County Secretary,  
County Government of Kirinyaga,  
P.O. Box 260 - 10304  
KUTUS

Date: ..... , 2018

Dear Sir,

**REF: TENDER FOR CONSTRUCTION OF KAGIO MATATU PARKING PHASE II  
SECTORS 6, 7, 8 & 9 IN KIINE WARD)**

In accordance with the Instructions to Tenderers, Conditions of Bid, Specifications and Bills of Quantities for the execution of the above named works, we, the undersigned offer to perform the works and remedy any defects therein for the sum of:

Kshs.....**[Amount in figures]**

KenyaShillings.....  
.....  
... **[Amount in words]**

We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Employer’s Representative’s notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.

We agree to abide by this tender for **a period of 120 days from the date of bid opening** and shall remain binding upon us and may be accepted at any time before that date.

Unless and until a formal Agreement is prepared and executed this bid together with your written acceptance thereof, shall constitute a binding Contract between us.

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

Dated this ..... day of .....20.....

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

duly authorized to sign tenders for and on behalf of:

.....  
..... **[Name of Bidder]**

Of.....  
..... **[Address of Bidder]**

**PIN No.**  
.....  
.....

**VAT CERTIFICATE No.**  
.....

**Witness: Name**  
.....

Address  
.....

Signature  
.....

**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

**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 \_\_\_\_\_  
[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

## **CONTRACT AGREEMENT**

THIS AGREEMENT made the \_\_\_day of \_\_\_\_\_20\_\_\_between.....[name of procurement entity] of .....[country of Procurement entity](hereinafter called "the Procuring entity") of the one part and .....[name of tenderer] of .....[city and country of tenderer](hereinafter called "the tenderer") of the other part.

WHEREAS the procuring entity invited tenders for certain materials and spares. Viz..... [Brief description of materials and spares] and has accepted a tender by the tenderer for the supply of those materials and spares in the sum of ..... [Contract price in words and figures]

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - (a) the Tender Form and the Price Schedule submitted by the tenderer;
  - (b) the Schedule of Requirements;
  - (c) the Details of Cover;
  - (d) the General Conditions of Contract;
  - (e) the Special Conditions of Contract; and
  - (f) the Procuring entity's Notification of Award.
3. In consideration of the payments to be made by the Procuring entity to the tenderer as hereinafter mentioned, the tenderer hereby covenants with the Procuring entity to provide the materials and spares and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Procuring entity hereby covenants to pay the tenderer in consideration of the provision of the materials and spares 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 hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Procuring entity)

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the tenderer)

**CONFIDENTIAL BUSINESS QUESTIONNAIRE**

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

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

*Part I- General :*  
 Business Name .....  
 Location of business premises.....  
 Plot No. .... Street/Road.....  
 Postal Address..... Tel. No.....  
 Nature of business.....  
 Current Trade Licence No..... Expiring date.....  
 Maximum value of business which you can handle at any one time : K£.....  
 Name of your bankers..... Branch .....

<input type="checkbox"/>	<b>Part 2 (a) – Sole Proprietor</b>																								
	Your name in full.....Age..... Nationality.....Country of origin..... *Citizenship details.....																								
<input type="checkbox"/>	<b>Part 2 (b) Partnership</b>																								
	Given details of partners as follows: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Name</th> <th style="text-align: center;">Nationality</th> <th style="text-align: center;">Citizenship Details</th> <th style="text-align: center;">Shares</th> </tr> </thead> <tbody> <tr><td>.....</td><td>.....</td><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td><td>.....</td><td>.....</td></tr> </tbody> </table>	Name	Nationality	Citizenship Details	Shares	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....								
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<input type="checkbox"/>	<b>Part 2 (c) – Registered Company:</b>																								
	Private or Public..... State the nominal and issued capital of company- Nominal K£..... Issued K£..... Given details of all directors as follows:- <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Name</th> <th style="text-align: center;">Nationality</th> <th style="text-align: center;">Citizenship Details</th> <th style="text-align: center;">Shares</th> </tr> </thead> <tbody> <tr><td>1. 1. ....</td><td>.....</td><td>.....</td><td>.....</td></tr> <tr><td>2. ....</td><td>.....</td><td>.....</td><td>.....</td></tr> <tr><td>3. ....</td><td>.....</td><td>.....</td><td>.....</td></tr> <tr><td>4. ....</td><td>.....</td><td>.....</td><td>.....</td></tr> <tr><td>5. ....</td><td>.....</td><td>.....</td><td>.....</td></tr> </tbody> </table>	Name	Nationality	Citizenship Details	Shares	1. 1. ....	.....	.....	.....	2. ....	.....	.....	.....	3. ....	.....	.....	.....	4. ....	.....	.....	.....	5. ....	.....	.....	.....
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4. ....	.....	.....	.....																						
5. ....	.....	.....	.....																						

Date .....Signature of Candidate.....

\*if Kenya Citizen, indicate under “Citizenship Details” whether by Birth, Naturalization or Registration.



**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

**TENDER SECURITY (BANK GUARANTEE)**

Bank Letterhead

Whereas ..... [*name of the tenderer*] (hereinafter called “the tenderer”) has submitted its tender dated ..... [*date of submission of tender*] for the supply, installation and commissioning of ..... [*name and/or description of the equipment*](hereinafter called “the Tender”) ..... KNOW ALL PEOPLE by these presents that WE ..... of ..... having our registered office at ..... (hereinafter called “the Bank/Insurance Company”), are bound unto ..... [*name of Procuring entity*] (hereinafter called “the Procuring entity”) in the sum of ..... for which payment well and truly to be made to the said Procuring entity, the Bank/Insurance Company binds itself, its successors, and assigns by these presents.

Sealed with the Common Seal of the said Bank/Insurance Company this \_\_\_\_\_

\_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

THE CONDITIONS of this obligation are:-

1. If the tenderer withdraws its Tender during the period of tender validity specified by the tenderer on the Tender Form; or
2. If the tenderer, having been notified of the acceptance of its Tender by the Procuring entity during the period of tender validity:
  - (a) fails or refuses to execute the Contract Form, 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 Procuring entity up to the above amount upon receipt of its first written demand, without the Procuring entity having to substantiate its demand, provided that in its demand the Procuring Entity will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This tender 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 above date.

*[signature of the authorized representative of the bank/insurance company]*.....

Seal .....\_\_\_\_\_

**PERFORMANCE SECURITY FORM**

To: .....

[name of the Procuring entity]

WHEREAS.....[name of tenderer]

(hereinafter called "the tenderer") has undertaken, in pursuance of Contract No. \_\_\_\_\_ [reference number of the contract] dated \_\_\_\_\_ 20 \_\_\_\_ to

supply.....

[Description services](Hereinafter called "the contract")

AND WHEREAS it has been stipulated by you in the said Contract that the tenderer shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Tenderer's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the tenderer a guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the tenderer, up to a total of .....  
*[amount of the guarantee in words and figures],*

and we undertake to pay you, upon your first written demand declaring the tenderer to be in default under the Contract and without cavil or argument, any sum or sums within the limits of .....  
*[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the \_\_\_\_ day of 20\_

\_\_\_\_\_  
Signature and seal of the Guarantors

\_\_\_\_\_  
*[name of bank or financial institution]*

\_\_\_\_\_  
*[address]*

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

**(Amend accordingly if provided by Insurance Company)**

**INSURANCE AUTHORIZATION FORM**

To [name of the Procuring entity] .....

WHEREAS .....

[Name of the principal]  
who are established and reputation dealers in ..... [Type of  
business] having registered offices at .....  
[Address of principal] do hereby authorizing .....  
[Name and address of tenderer] to submit a tender/act on behalf of .....  
[Name of Insurance], [reference of the tender] for the stated (particulars of tender).

We hereby extend our full guarantee and warranty as per the General Conditions of Contract for the services to be provided against this Invitation for Tenders.

\_\_\_\_\_  
[Signature for and on behalf of the principal]

Note: This letter of authority should be on the letterhead of the principal and should be duly signed and stamped.

**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.

\_\_\_\_\_

\_\_\_\_\_

4. Please acknowledge receipt of this letter of notification signifying your acceptance.
5. 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.
6. 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 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.
- etc.

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

- 1.
  - 2.
- etc

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

**TENDER QUESTIONNAIRE**

Please fill in block letters.

1. Full names of tenderer

.....

2. Full address of tenderer to which tender correspondence is to be sent (unless an agent has been appointed below)

.....

3. Telephone number (s) of tenderer

.....

4. Telex address of tenderer

.....

5. Name of tenderer's representative to be contacted on matters of the tender during the tender period

.....

6. Details of tenderer's nominated agent (if any) to receive tender notices. This is essential if the tenderer does not have his registered address in Kenya (name, address, telephone, telex)

.....

.....

\_\_\_\_\_  
Signature of Tenderer

Make copy and deliver to: \_\_\_\_\_ (*Name of Employer*)



## **QUALIFICATION INFORMATION**

### **1. Individual Tenderers or Individual Members of Joint Ventures**

1.1 Constitution or legal status of tenderer (attach copy or Incorporation Certificate);

Place of registration: \_\_\_\_\_

Principal place of business \_\_\_\_\_

Power of attorney of signatory of tender \_\_\_\_\_

1.2 Total annual volume of construction work performed in the last five years

Year	Volume	
	Currency	Value

1.3 Work performed as Main Contractor on works of a similar nature and volume over the last five years. Also list details of work under way or committed, including expected completion date.

Project name	Name of client and contact person	Type of work performed and year of completion	Value of Contract	Completion Status

1.4 Major items of Contractor's Equipment proposed for carrying out the Works. List all information requested below.

2

Item of Equipment	Description, Make and age (years)	Condition ( new, good, poor) and number available	Owned, leased (from whom?), or to be purchased (from whom?)

1.5 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data.

Position	Name	Years of experience (general)	Years of experience in proposed position
Project Manager, etc.			

1.6 Financial reports for the last five years: balance sheets, profit and loss statements, auditor's reports, etc. List below and attach copies.

---

---

1.7 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of supportive documents.

---

1.8 Name, address and telephone, telex and facsimile numbers of banks that may provide reference if contacted by the Employer.

---

1.9 Statement of compliance with the requirements of Clause 1.2 of the Instructions to Tenderers.

---

1.10 Proposed program (work method and schedule) for the whole of the Works.

### **3 Joint Ventures**

3.4 The information listed in 1.1 – 1.10 above shall be provided for each partner of the joint venture.

3.5 The information required in 1.11 above shall be provided for the joint venture.

3.6 Attach the power of attorney of the signatory(ies) of the tender authorizing signature of the tender on behalf of the joint venture

3.7 Attach the Agreement among all partners of the joint venture (and which is legally binding on all partners), which shows that:

- a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
- b) one of the partners will be nominated as being in charge, authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture; and
- c) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

**DETAILS OF DOMESTIC SUB-CONTRACTORS**

If the Tenderer wishes to sublet any portions of the Works under any heading, he must give below details of the sub-contractors he intends to employ for each portion.

Failure to comply with this requirement may invalidate the tender.

(1) Portion of Works to be sublet: .....

[i) Full name of Sub-contractor and address of head office: .....

.....

(ii) Sub-contractor's experience of similar works carried out in the last 3 years with Contract value: .....

(2) Portion of Works to sublet: .....

(i) Full name of sub-contractor and address of head office: .....

.....

(ii) Sub-contractor's experience of similar works carried out in the last 3 years with contract value: .....

\_\_\_\_\_  
[Signature of Tenderer)

\_\_\_\_\_  
Date

**TENDER SECURING DECLARATION FORM**

*[The Bidder shall fill in this Form in accordance with the instructions indicated]*

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

Tender

No..... To:

County Government of Kirinyaga

We, the undersigned, declare that:

1. We understand that, according to your conditions, bids must be supported by a Tender Securing Declaration.
2. We accept that we will automatically be suspended from being eligible for bidding in any contract with the Purchaser for the period of time of *[insert number of months or years]* starting on *[insert date]*, if we are in breach of our obligation(s) under the bid conditions, because we:
  - (a) have withdrawn our Bid during the period of bid validity specified by us in the Bidding Data Sheet; or
  - (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Tenderers.
3. We understand this Tender Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.
4. We understand that if we are a Joint Venture, the Tender Securing Declaration must be in the name of the Joint Venture that submits the bid. If the Joint Venture has not been legally constituted at the time of bidding, the Tender Securing Declaration shall be in the names of all future partners as named in the letter of intent.

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

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

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

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

**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.
- etc.

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

- 1.
  - 2.
- etc

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

#### 2.12.4.1

#### 2.12.4.2 TABLE OF CONTENTS

101 SPECIAL SPECIFICATIONS.....	73
102 EXTENT OF CONTRACT.....	73
Project location.....	73
The area is one of the major Towns in the County generally sloping towards Sagana Town and has a lot of activities. It is the Central Market place attracting merchants from all over the Country. The parking bays will organise how the vehicles are parked, make the place all weather and enable the County to correct revenue.....	73
104 PROGRAMME OF EXECUTION OF THE WORKS.....	74
105 ORDER OF EXECUTION OF WORKS.....	74
107 TAKING OVER CERTIFICATE .....	74
109 NOTICE OF OPERATIONS.....	74
117 HEALTH, SAFETY AND ACCIDENTS.....	75
121 DIVERSION OF SERVICES .....	75
123 LIAISON WITH GOVERNMENT AND POLICE OFFICIALS .....	75
124 LAND FOR ALL CAMPS SITES AND FOR THE CONTRACTOR'S OWN PURPOSES, INCLUDING TEMPORARY WORKS.....	75
128 STORAGE OF MATERIALS .....	76
129 TEST CERTIFICATES.....	76
131 SIGNBOARDS .....	76
132 ENGINEER'S OFFICE.....	76
134 ENGINEER'S LABORATORY .....	78
137 ATTENDANCE UPON THE ENGINEER AND HIS STAFF .....	78
138 VEHICLES AND DRIVERS FOR THE ENGINEER AND HIS STAFF AND METHOD OF PAYMENT .....	78
139 RECEIPTED ACCOUNTS.....	78
142 LIQUIDATED DAMAGES.....	79
143 ENVIRONMENTAL PROTECTION .....	79
205 SOILS AND GRAVEL .....	79
<b>SECTION 3 - SETTING OUT &amp; TOLERANCES.....</b>	<b>79</b>
301 SETTING OUT .....	79
<b>The contractor while pegging out the distances shall ensure that the existing alignment is followed unless instructed otherwise by the Engineer.</b>	<b>79</b>
<b>SECTION 4- SITE CLEARANCE AND TOP SOIL STRIPPING .....</b>	<b>80</b>
402 REMOVAL OF TOPSOIL .....	80
403 REMOVAL OF STRUCTURES, FENCES AND OBSTRUCTIONS.....	80
<b>SECTION 5 – EARTHWORKS .....</b>	<b>80</b>
504 PREPARATION PRIOR TO FORMING EMBANKMENT .....	80
505 CONSTRUCTION OF EMBANKMENTS .....	80
508 COMPACTION OF EARTHWORKS.....	81
511 BORROW PITS.....	81
515 SIDE DRAINS .....	82
517 MEASUREMENT AND PAYMENT .....	82
517(e)Overhaul .....	82
518 Grading and shaping .....	82

<b>SECTION 6 - QUARRIES, BORROW PITS, STOCKPILES &amp; SPOIL AREAS .....</b>	<b>82</b>
601 GENERAL.....	82
<b>SECTION 7 - EXCAVATION AND FILLING FOR STRUCTURES .....</b>	<b>83</b>
703 EXCAVATION OF FOUNDATIONS FOR STRUCTURES.....	83
707 BACKFILLING FOR STRUCTURES .....	83
709 EXCAVATION FOR RIVER TRAINING AND NEW WATER COURSES .....	83
710 STONE PITCHING .....	83
711 GABIONS.....	84
712 RIP-RAP PROTECTION WORK.....	84
714 BACKFILL BELOW STRUCTURES .....	85
<b>SECTION 8 - CULVERTS AND DRAINAGE WORKS .....</b>	<b>85</b>
801 SCOPE OF SECTION.....	85
804 EXCAVATION FOR CULVERTS AND DRAINAGE WORKS.....	85
805 EXCAVATION IN HARD MATERIAL.....	86
809 BEDDING AND LAYING OF PIPE CULVERTS .....	86
810 JOINTING CONCRETE PIPES.....	86
812 BACKFILLING OVER PIPE CULVERTS .....	86
814 SUBSOIL DRAINS.....	87
817 REPAIRS TO DRAINS.....	87
(vi) Spoil Material.....	88
819 CLEANING AND MAINTENANCE .....	89
<b>SECTION 9 - PASSAGE OF TRAFFIC .....</b>	<b>89</b>
901 SCOPE OF THE SECTION .....	89
906 PASSAGE OF TRAFFIC THROUGH THE WORKS .....	89
907 SIGNS, BARRIERS AND LIGHTS.....	90
909 ASSISTANCE TO PUBLIC.....	90
912 MEASUREMENT AND PAYMENT .....	90
<b>SECTION 10 - GRAVEL WEARING COURSE.....</b>	<b>90</b>
1001 GENERAL.....	90
<b>1003 MATERIAL REQUIREMENTS .....</b>	<b>90</b>
<b>SECTION 12 - NATURAL MATERIAL SUBBASE AND BASE .....</b>	<b>91</b>
1201 GENERAL.....	91
1203 MATERIAL REQUIREMENTS.....	92
1209 MEASUREMENT AND PAYMENT .....	92
1210 HAND PACKED STONE .....	92
1211 REPROCESSING EXISTING PAVEMENT LAYERS .....	93
<b>SECTION 17 - CONCRETE WORKS .....</b>	<b>96</b>
1703 MATERIALS FOR CONCRETE .....	96
(a) Materials.....	96
1703(A) LEVELLING CONCRETE (CLASS 15/20) FOR BOTTOM SLAB INCLUSIVE OF COST OF FORM WORKS.....	96
1703(B) REINFORCING BARS OF WALLS AND SLABS .....	97
1703 (C) FORMWORK FOR CULVERT WALLS AND SLABS .....	99
<b>SECTION 20 - ROAD FURNITURE .....</b>	<b>108</b>
2004 PERMANENT ROAD SIGNS.....	108
2004B EXISTING ROAD SIGNS.....	108
2006 GUARDRAILS AND HANDRAILS.....	108
2007 ROAD MARKINGS.....	108
This will be thermoplastic done as specified .....	108



## 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 7200 m<sup>2</sup> located in Kagio Market on Mutithi Ward side. It will drain all the storm water from the highway and from the shops. This will make the Town clean as the mad will be replaced with Cabro pavement.

#### ***Topography***

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

**132 ENGINEER'S OFFICE**

The Contractor shall equip the office of the Engineer with the following items which on completion of the contract shall revert to the Employer.

The contractor shall be responsible for paying all charges and fees related to the use of the Air Time The Resident Engineer shall be reimbursed the same on production of proof of payment.

**(a) Stationery**

- |   |      |
|---|------|
| 1. Desk with lockup drawers                 | 5No. |
| 2. Chairs executive (swivel type)           | 1No. |
| 3. Lockable steel cabinets (with 4 drawers) | 2No. |
| 4. Bookshelf 3 shelves 1.2m long            | 1No. |
| 5. Stapling machine (Ofrex) and pins        | 5No. |
| 6. Paper punch                              | 5No. |
| 7. 3m tape measure                          | 5No. |

8. Scientific calculator	5No.
9. Fully equipped first aid kit	2No.
10. Waste paper baskets	6No.
11. Electric heater fans	4No.
12. Padlock	4No.
13. Wall clocks battery powered	4No.
14. Calculators	5No.
15. Filing Trays	12No.
16. Chairs (standard desk type)	15No.
17. Diary	6No.
18. Inventory Book	4No.
19. Diplomat carbon Paper (Packet)	2No.
20. Eraser	12No.
21. Rulers	12No.
22. Hard cover note books (4 Quire)	6No.
23. Field Note books	24No.
24. Ream of ruled papers	40No.
25. Envelopes 29no. per packet	10No.
26. Payment Voucher Books	4No.
27. Pens (Bic ball points)- (packets)	25No.
28. Cellotape	5No.
29. Office glue stick	5No.
30. Dictionary	2No.
31. Masking tape	6No.
32. Highlighters (dozens)	2No.
33. Spring files	100No.

- (b) **Photocopying Machine** 1No.  
Speed 15-17 copies per minute  
Paper size A6 – A3  
Recommended monthly volume 6000 copies  
Type: Desktop  
Paper feed - 250 sheets – Cassette – Stacks by pass

(c) **ICT Equipment and Accessories**

Specifications

- (i) **Computer**
- |                       |                   |
|-----------------------|-------------------|
| 1. Processor          | Core i5 or higher |
| 2. RAM                | 4GB (Minimum)     |
| 3. Hard Disk          | 500 GB (Minimum)  |
| 4. Monitor            | 17" HD            |
| 5. Keyboard           | 101 Keyboard      |
| 6. Operating System   | Windows 10        |
| 7. One years warranty |                   |
- (ii) **Laser Jet Printer**
- |           |                         |
|-----------|-------------------------|
| 1. Speed  | 20ppm                   |
| 2. Memory | 16MB expandable to 80MB |

- |              |                                       |  |
|--------------|---------------------------------------|--|
|              | 3. Resolution                         | 1200X1200dpi   |
|              | 4. Compatibility                      | MS Windows 95/98/2000/XP   |
|              | 5. Power Input                        | 220-240V   |
| <b>(iii)</b> | <b>UPS</b>                            |  |
|              | 1. Rating                             | 650 VAC (Minimum)  |
|              | 2. Input voltage                      | 220-240 V (Minimum)  |
|              | 3. Output                             | 220- 240 V (Minimum)   |
|              | 4. Output frequency                   | 50-60 Hz   |
|              | 5. Battery module                     | Minimum 25 minutes backup time on 50%<br>rated sealed lead-acid Short recharge time<br>(Maximum 5hours for 100%) |
|              | 6. Protection                         | Output overload<br>Input/output short – circuit  |
| <b>iv)</b>   | <b>Software</b>                       |  |
|              | 1. Microsoft Office 2010 with license |  |
|              | 2. Latest Anti Virus                  |  |

The contractor shall be paid for these on provision under items specified in the BOQ.or reimburse the Engineer on the production of the receipts

**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.

**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
- c)

**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.

(a)

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 of 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. (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 reflectorized 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.

3 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**

4 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.

5 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

6 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

7

8 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: -

Bar type and the Cross-section in millimeters	Weight of Bar in Kilograms—per 12m length of bar
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.

**(b) (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**

8.12 Sieve Size	8.13 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>  
Maximum size of coarse aggregates : 20mm  
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.

(c)

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>o</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

8.14 Sieve Size	8.15 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

(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%

(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.

20mm

- Design compressive strength (28 days) :  
30N/mm<sup>2</sup>
- Maximum size of coarse aggregates :
- 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.

(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 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 80N/mm<sup>2</sup> . **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.





<b>Project Name:</b> Paving & Marking of Kagio Matatu Park Phase 2					
<b>Road No.:</b>					
<b>Contract No. :</b>			<b>Area</b>		<b>12,000m<sup>2</sup></b>
<b>Bill of Quantities</b>				Page:3	
<b>Bill No.5 EARTHWORKS</b>				<b>Project:</b>	
<b>Item No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Bid Rate(Kshs)</b>	<b>Amount KShs</b>
5.01	Cut to spoil soft materials or re- use and as directed by the Engineer	M <sup>3</sup>	3,241		
5.02	Cut to spoil hard materials or re- use and as directed by the Engineer	M <sup>3</sup>	3,146		
<b>Total Carried Forward to Summary:</b>					



<b>Project Name:</b> Paving & Marking of Kagio Matatu Park Phase 2					
<b>Road No.:</b>					
<b>Contract No. :</b>				<b>Area</b>	<b>12,000m<sup>2</sup></b>
<b>Bill of Quantities</b>					Page:5
<b>Bill No.8</b>	<b>CULVERT AND DRAINAGE WORKS</b>				<b>Project:</b>
<b>Item No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Bid Rate(Kshs)</b>	<b>Amount KShs</b>
8.01	Prepare bed and shape surface to receive IBDs for storm water in the parking areas and roads as directed by the Engineer	M <sup>2</sup>	1330		
8.02	Cast in-situ IBDs (Concrete Class 20(20)) on drainage areas as instructed by the Engineer (the rate should be inclusive of formwork F3).	M <sup>3</sup>	150.75		
8.03	Provide and lay, joint 600x250x150mm Kerbs precast in concrete class 20(20).	M	2460		
8.04	Provide and lay, joint 600x125x100 mm channels in concrete class 20(20)	M	2460		
8.05	Prepare Class 20(20) for other Kerbs and Channels bed and haunching as instructed by the Engineer	M <sup>3</sup>	76		
8.06	Prepare Class 15(20) for other Kerbs and Channels bed and haunching as instructed by the Engineer	M <sup>3</sup>	76		
<b>Total Carried Forward to next page:</b>					

<b>Total Brought Forward to next page:</b>							
<b>Project Name:</b>	<b>Paving &amp; Marking of Kagio Matatu Park Phase 2</b>						
	<b>Project: Kagio Town</b>						
	<b>Contract No. : -----</b>			<b>Area (SM)</b>	<b>12,000m<sup>2</sup></b>		
<b>Bill of Quantities</b>							Page: 5
<b>Bill No.8-B: CULVERT AND DRAINAGE WORKS</b>							
<b>Item No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Bid Rate (Kshs)</b>	<b>Amount KShs</b>		
8.07	Excavation for 600 and 900 mm dia. Culverts and mitre drains in soft materials	M <sup>3</sup>	10.00				
8.08	Provide and install 600 diameter culverts as instructed by the Engineer	M	7.00				
8.09	Provide and install 900 diameter culverts as instructed by the Engineer	M	7.00				
8.10	Provide and place concrete class 20(20) for headwalls, wingwalls, key beams and aprons inclusive of formwork F1	M <sup>3</sup>	5.32				
8.11	Provide and place class 20(20) to culvert surround inclusive of formwork F3.	M <sup>3</sup>	14.00				
8.12	Provide and place class 15(20) to culvert surround inclusive of formwork F3.	M <sup>3</sup>	5.00				
8.13	Provide and place 200mm thick stone pitching including grouting to outfall drains as detailed in the drawings or as directed by the Engineer	M <sup>2</sup>	312.00				
	<b>Total from this page</b>						
<b>Total Carried Forward to Summary:</b>							

<b>Project Name:</b> Paving & Marking of Kagio Matatu Park Phase 2					
<b>Road No.:</b>					
<b>Contract No. :</b>				<b>Area</b>	<b>12,000m<sup>2</sup></b>
<b>Bill of Quantities</b>					Page:6
<b>Bill No.9 PASSAGE OF TRAFFIC</b>					<b>Project:</b>
<b>Item No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Bid Rate(Kshs)</b>	<b>Amount KShs.</b>
9.01	Maintain passage of traffic through the works	L/Sum	150,000	1	150,000.00
<b>Total Carried Forward to Summary:</b>					150,000.00

<b>Project Name:</b> Paving & Marking of Kagio Matatu Park Phase 2					
<b>Road No.:</b>					
<b>Contract No. :</b>			<b>Area</b>		<b>12,000m<sup>2</sup></b>
<b>Bill of Quantities</b>					Page: 8
<b>Bill No.1</b>	<b>NATURAL MATERIAL FOR SUBBASE AND BASE</b>				<b>Project:</b>
<b>Item No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Bid Rate(Kshs)</b>	<b>Amount KShs</b>
12.01	Reshape, water and proof roll the excavated surface on the parking area to receive hand packed stone as directed by the Engineer.	M <sup>2</sup>	12,070.0		
12.02	Provide, lay and compact hand packed stone, in 150mm thick layers in excavated areas on shoulders, driveway/parking areas as instructed by the Engineer.	M <sup>3</sup>	3,522.0		
12.04	Provide, lay and compact 50mm thick Cabro blocks strength 45N/mm <sup>2</sup> in all raised areas as instructed by the Engineer.	M <sup>2</sup>	1,455.0		
12.05	Provide, lay and compact 80mm thick Cabro blocks strength 80N/mm <sup>2</sup> on shoulders, driveway/parking areas as instructed by the Engineer.	M <sup>2</sup>	9,385.0		
12.06	Allow for quality quarry dust 0/3m for paving blocks	M <sup>3</sup>	542.0		
12.07	Provide, place, spread, water and compact gravel for subbase and base courses in 150mm thick layers.	M <sup>3</sup>	2565		
<b>Total Carried Forward to Summary:</b>					

<b>Project Name:</b> Paving & Marking of Kagio Matatu Park Phase 2					
<b>Road No.:</b>					
<b>Contract No. :</b>				<b>Area</b>	<b>12,000m<sup>2</sup></b>
<b>Bill of Quantities</b>					Page: 9
<b>Bill No.20 ROAD FURNITURE</b>					<b>Project:</b>
<b>Item No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Unit Bid Rate(Kshs)</b>	<b>Amount KShs</b>
20.01	Preapre, Clean , Mark 100mm wide lane, and spray White thermoplastic paint as instructed by the Engineer	M	1,500		
20.02	As 10.01 but Yellow thermoplastic paint as instructed by the Engineer	M	1,000		
20.03	Provide and install retror reflective delineators Yellow and White (Cat's Eyes) as directed by the Engineer	No.	80		
20.04	Provide and erect priority type signs 1000mm size	No.	2		
20.05	Provide standard mandatory signs 600mm diameter	No.	4		
20.06	Provide and erect standard informatory signs 400 x 300 mm	No.	4		
<b>Total Carried Forward to Summary:</b>					

<b>Project Name:</b>	<b>Paving &amp; Marking of Kagio Matatu Park Phase 2</b>
<b>Road No.:</b>	<b>Area</b>
<b>Contract No. :</b>	<b>12,000m<sup>2</sup></b>

<b>Bill of Quantities</b>		Page: 10
	<b>Summary</b>	<b>Project:</b>
<b>Item No.</b>	<b>Description</b>	<b>Amount (KShs)</b>
1	Preliminaries and General	
4	SITE CLEARANCE & TOP SOIL STRIPPING	
5	EARTHWORKS	
8	CULVERT AND DRAINAGE WORKS	
9	PASSAGE OF TRAFFIC	150,000.00
12	NATURAL MATERIAL FOR SUBBASE AND BASE	
20	ROAD FURNITURE	
	<i>Sub Total 1</i>	
	Add 16% VAT	
	<b>Total carried to the form of Tender</b>	