



European Union



Adaptation for  
Smallholder  
Agriculture  
Programme

**ASAP**

MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES AND COOPERATIVES  
STATE DEPARTMENT FOR CROP DEVELOPMENT AND AGRICULTURAL RESEARCH  
KENYA CEREAL ENHANCEMENT PROGRAMME – CLIMATE RESILIENT  
AGRICULTURAL LIVELIHOODS WINDOW  
P.O. BOX 30028 - 00100, KILIMO HOUSE,  
CATHEDRAL ROAD, NAIROBI

NATIONAL SHOPPING TENDER FOR SPOT IMPROVEMENT WORKS LEADING TO  
MUTUOBARE GRAIN STORAGE FACILITY IN EMBU COUNTY

MOALF&C/SDCD&AR/KCEP-CRAL/PROC/088/2021-2022

**CLOSING DATE: 10<sup>th</sup> November, 2021**

**AT: 10.00 am**

## SECTION I: INVITATION FOR TENDERS

TENDER REFERENCE NO: MOALF&C/SDCD&AR/KCEP-CRAL/PROC/088/2021-2022

TENDER NAME: NATIONAL SHOPPING TENDER FOR SPOT IMPROVEMENT WORKS LEADING TO MUTUOBARE GRAIN STORAGE FACILITY IN EMBU COUNTY

- 1.1 The Kenya Cereals Enhancement Programme-Climate Resilient Agricultural Livelihoods (KCEP-CRAL) has received financing from the International Fund for Agricultural Development (“the Fund” or “IFAD”) towards the **cost of road spot improvement works leading to Mutuobare store located in Mbeere south sub County of Embu County located in Mutuobare market approximately 37.9kms from Kiritiri town and 67.7kms from Embu town. The storage facility located in a Public land and is expected to serve farmers in the area.**
- 1.2 The use of any IFAD financing shall be subject to IFAD’s approval, pursuant to the terms and conditions of the financing agreement, as well as IFAD’s rules, policies and procedures. IFAD and its officials, agents and employees shall be held harmless from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any party in connection with KCEP-CRAL Programme.
- 1.3 This procurement is based on the National Shopping method as laid out in the IFAD Procurement Handbook that can be accessed via the IFAD website at [www.ifad.org/project-procurement](http://www.ifad.org/project-procurement)
- 1.4 The works to be carried out under this contract comprises of **Construction of two box culverts along Catholic-Kangondo-Muchiri Kiremba Road at Shauri Marikiri River and Kangondo Stream.**
- 1.5 This procurement is based on the national shopping method as laid out in the IFAD Procurement Handbook that can be accessed via the IFAD website at [www.ifad.org/project-procurement](http://www.ifad.org/project-procurement).
- 1.6 The document and drawings shall be downloaded FREE OF CHARGE from the Ministry’s website: [www.kilimo.go.ke](http://www.kilimo.go.ke) under “tender” links or from the Programme Website [www.kcepccral.go.ke](http://www.kcepccral.go.ke)
- 1.7 Special precautions shall be required throughout the contract period to avoid damage to the existing structures and other services within the site. The Contractor shall allow for making good any damage arising from his actions during execution of this contract at his own expense. The scope of works shall be as described in the tender document.
- 1.8 This document has been prepared by KCEP-CRAL Programme and is based on the standard procurement document issued by IFAD on [www.ifad.org/project-procurement](http://www.ifad.org/project-procurement) . This document is to be used for the procurement of works using shopping as procurement method in projects financed in whole or in part by IFAD.

- 1.9 This procurement is based on the shopping method as laid out in the IFAD Procurement Handbook that can be accessed via the IFAD website at [www.ifad.org/project-procurement](http://www.ifad.org/project-procurement)
- 1.10 This contract will be implemented in a manner consistent with IFAD's Social, Environmental and Climate Assessment Procedures (SECAP), available on <https://www.ifad.org/en/secap>
- 1.11 Special precautions shall be required throughout the contract period to avoid damage to the existing the structures and other services within the site. The Contractor shall allow for making good any damage arising from his actions during execution of this contract at his own expense.
- 1.12 Eligible bidders must forward their particulars immediately for records and any further tender clarifications and addenda. Email particulars to [tenders.kcepccralprogramme@gmail.com](mailto:tenders.kcepccralprogramme@gmail.com).
- 1.13 The bidder at their own responsibility, cost, 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 quotation and entering into a contract for the construction of works. The site visit is not a Mandatory requirement
- 1.14 Prices quoted should be net inclusive of all taxes, must be in **Kenya shillings** and shall remain valid for **(120) days** from the closing date of tender.
- 1.15 Tenders must be accompanied by security in the format specified in the attached form of tender Security, in a bank's letterhead, and amount indicated. The tender must be delivered in plain sealed envelope clearly marked **'NATIONAL SHOPPING TENDER FOR SPOT IMPROVEMENT WORKS LEADING TO MUTUOBARE STORAGE FACILITY IN EMBU COUNTY- MOALF&C/SDCD&AR/KCEP-CRAL/PROC/088/2021-2022'**
- 1.16 The **original** document of the tender must be delivered to and dropped in the tender box situated at the reception of delivered to and dropped in the tender box situated at the reception of MOALF Ground floor Kilimo house, Cathedral Road. so as to reach the below address
- The Principal Secretary  
State Department for Crop development and Agricultural Research  
Kenya Cereal Enhancement Programme –Climate Resilient Agricultural  
Livelihoods Window  
P.O. BOX 30028 - 00100,  
Nairobi  
Tel: 0770174188  
On or before: 10<sup>th</sup> November at 1000hrs**
- 1.17 Tenders will be opened at **10<sup>th</sup> November at 10.30am** at ASCU boardroom.

- 1.17.1 Due to the Corona Virus (COVID-19) pandemic, the Government of Kenya has put in place measures to reduce the potential spreading of the Virus. The Public Procurement Regulatory Authority (PPRA) has continued to offer appropriate advice and guidance to support the preventive measures on the spreading of COVID-19 outlined by the Government for handling procurement activities. These guidelines were issued on the 27th March 2020. IFAD has also identified a range of rapid procurement modalities to support the Programme procurement activities in order to minimize the impact of COVID-19 on Programme implementation.
- 1.17.2 The following **MEASURES** shall be adhered to during the Bid Opening of this tender.
- a) The bidders shall not be allowed to attend the bid opening as measures put in the MOALF&C<sup>1</sup>-SDCD&AR-KCEP-CRAL Programme
  - b) Failure by bidders to attend any bid opening **shall not** invalidate the process.
  - c) The results of the bid opening shall be communicated by email within 30-days from the date of the tender opening. Bidders should therefore submit their registration details via [tenders.kcepccralprogramme@gmail.com](mailto:tenders.kcepccralprogramme@gmail.com)
  - d) Virtual opening shall also be conducted and a **zoom link shall be provided for those bidders who shall have registered their particulars in the email above (c).**
- 1.17.3 Eligibility:
- a) To enhance equity, **bidders shall bid for only one (1)** bid under the published Tender Notice.  
Each Bidder shall submit **only one Bid**, either individually or as a partner in a joint venture. A Bidder who submits or participates in more than one Bid **shall be disqualified**. Partners in a joint venture shall be jointly and severally liable for the execution of the Contract
  - b) Director (s) bidding **under different companies** for the same tender **shall be disqualified**
  - c) Only those bidders registered in the Categories as indicated in the tender document shall bid for the respective tenders
  - d) Bidders with Ongoing / Incomplete works projects with KCEP-CRAL Programme are not eligible to bid and **shall be disqualified**
- 1.18 Any form of Canvassing will lead to disqualification

## **SENIOR PROGRAMME COORDINATOR**

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<sup>1</sup> Ministry of Agriculture, livestock, fisheries and Cooperatives,

## INSTRUCTIONS TO BIDDERS:

- 2.1 The bidder shall not have any actual, potential or reasonably perceived conflict of interest. A bidder with an actual, potential or reasonably perceived conflict of interest shall be disqualified unless otherwise explicitly approved by the Programme/ IFAD.
- 2.1.1 A bidder, including their respective personnel and affiliates, are considered to have a conflict of interest if any of them;
- a) has a relationship that provides them with undue or undisclosed information about or influence over the evaluation process and the execution of the contract,
  - b) participates in more than one quotation under this procurement action
  - c) has a business or family relationship with a member of the employer's board of directors or its personnel, the Fund or its personnel, or any other individual that was, has been or might reasonably be directly or indirectly involved in any part of:
    - (i) the preparation of this bidding document,
    - (ii) the selection process for this procurement, or
    - (iii) Execution of the contract.
- 2.1.2 The bidder and the contractor have an ongoing obligation to promptly disclose any situation of actual, potential or reasonably perceived conflict of interest during preparation of the quotation, the evaluation process or the contract execution.
- 2.1.3 Failure to properly disclose any of said situations in a promptly manner may lead to appropriate actions, including the disqualification of the bidder, the termination of the contract and any other as appropriate under the IFAD Policy on Preventing Fraud and Corruption in its Projects and Operations.
- 2.2 All offerors are required to comply with the Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations (hereinafter, "IFAD's Anticorruption Policy") while competing for, or in executing, the contract.
- a) If determined that a offeror or any of its personnel or agents, or its sub-consultants, sub-contractors, service providers, suppliers, sub-suppliers, and/or the latter's personnel or agents, has, directly or indirectly, engaged in any of the Prohibited Practices as defined in IFAD's Anticorruption Policy or sexual harassment, exploitation and abuse as defined in IFAD's Policy to Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse in competing for, or in executing, the contract, the quotation may be rejected or the contract may be terminated by the employer.
  - b) In accordance with the IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations, the Fund may investigate and, when applicable, sanction entities and individuals, including by debarring them, either indefinitely or for a stated period of time, to participate in any IFAD-financed or IFAD-managed activity or operation. A debarment includes, inter alia, ineligibility to: (i) be awarded or otherwise benefit from any IFAD-financed contract, financially or in any other manner; (ii) be a nominated sub-contractor, consultant, manufacturer, contractor, sub-supplier, agent or service provider of an otherwise eligible firm being awarded an IFAD-financed contract; and (iii) receive the proceeds of any loan or grant provided by the Fund. The Fund may also unilaterally recognize eligible debarments by any of the International Financial Institutions signatories to the Agreement for Mutual Enforcement of Debarment Decisions.

- c) Offerors and any of their personnel and agents, and their sub-consultants, sub-contractors, service providers, contractors, sub-suppliers, and the latter's personnel and agents are required to fully cooperate with any investigation conducted by the Fund, including by making personnel available for interviews and by providing full access to any and all accounts, premises, documents and records (including electronic records) relating to this bidding process or the execution of the contract and to have such accounts, premises, records and documents audited and/or inspected by auditors and/or investigators appointed by the Fund.
- d) Offerors have the ongoing obligation to disclose in their quotation and later in writing as may become relevant: (i) any administrative sanctions, criminal convictions or temporary suspensions of themselves or any of their key personnel or agents for corrupt, fraudulent, collusive, coercive or obstructive practices, and (ii) any commissions or fees paid or to be paid to agents or other parties in connection with this bidding process or the execution of the contract. Offerors must disclose the name and contact details of the agent or other party and the reason, amount and currency of the commission or fee paid or to be paid. Failure to comply with these disclosure obligations may lead to rejection of the quotation or termination of the contract.
- e) Offerors shall keep all records and documents, including electronic records, relating to this bidding process available for a minimum of three (3) years after notification of completion of the process or, in case the offeror is awarded the contract, execution of the contract.

2.3 All beneficiaries of IFAD Funding or funds administered by IFAD, including the employer, any offerors, implementing partners, service providers and suppliers, should observe the highest standards of integrity during the procurement and execution of such contracts, and commit to combat money laundering and terrorism financing consistent with IFAD's Anti-Money Laundering and Countering the Financing of Terrorism Policy.

2.4 Your complete quotation shall consist of the following documents:

**2.4.1 Preliminary Examination**

- a) Certified Copy of Certificate of Incorporation / business registration
- b) Certified Copy of Registration Certificate with the National Construction Authority (NCA) in Category 6, 7 and 8 for civil works -Roads
- c) Certified Copy **Valid** NCA practicing license
- d) Certified Copy of Copy of **Valid** Tax Compliance Certificate (will be verified on the KRA TCC Checker
- e) Certified Copy of **Valid** business permit (trade license)
- f) Certified Copy of CR12 Form (Issued within the **last 6 months** from the Tender Opening Date).
- g) Certified copy of **Valid** Certificate of Registration for Access to government procurement opportunities, from The National Treasury or County Governments for Women **Only** – Category Small Works & Engineering. (Certificates may be verified from the issuing Agencies)
- h) Duly filled, signed and stamped business questionnaire form in all sections
- i) Tender Security of **Ksh 50,000.00**
- j) Duly filled and signed forms in Annex 7-12 in the provided format

2.4.2 Qualification of the bidder: To qualify for award of the contract, an offeror shall meet the following minimum qualifying criteria: *(The bidder must provide evidence for all items from K-N). The following shall be considered during this stage and post qualification:*

k) Experience as a contractor in the construction of at **least two works'** contract of the nature and complexity equivalent to the works included in this Invitation, over the last three years; *Attach copies of contract and or Interim/completion certificates. [Attaching award letters only shall be inadequate and will not be considered as evidence of experience]*

l) The contractor must provide the following key staff and **attach** their respective CVs:

#	Title	Years of experience
	<i>[insert e.g. project site manager]</i>	
1	Site Agent [Minimum of a diploma in civil engineering/ construction management or related field]	
2	Fore man [ Include Qualification/ Certificate]	

m) The contractor must prove access to the following equipment which shall not be more than 7 years old: Demonstrate ownership / hire or lease of the equipment below

#	Name of equipment and production capacity	Year of Manufacture
	<i>[insert e.g. excavator on wheels with 0.5 cubic meter bucket capacity and excavator arm reach of minimum 4 metres]</i>	
1	Concrete Mixer	
2	Poke Vibrator	
3	Pick Up / Canter	

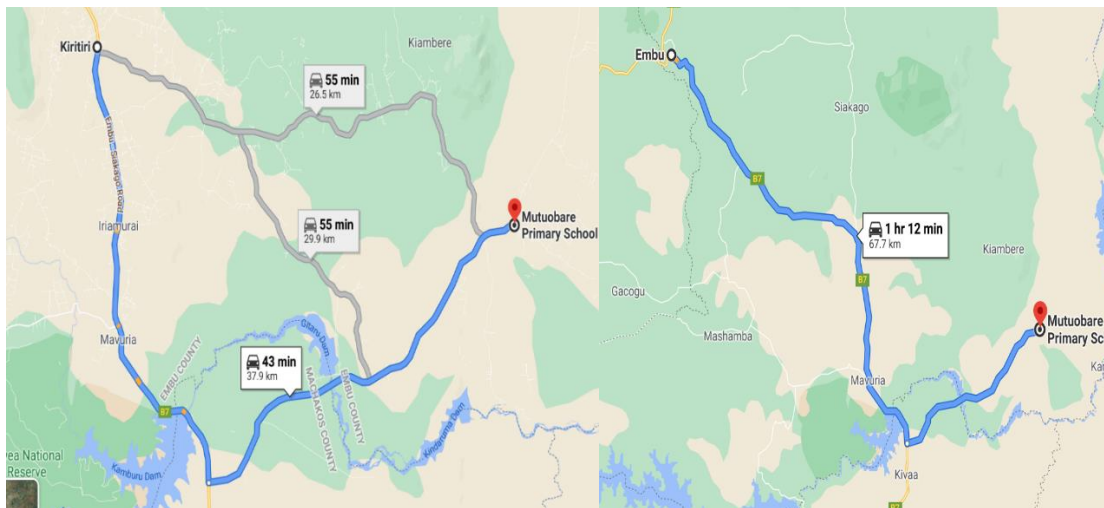
n) Submit evidence of access to financial resources to successfully complete the works i.e. access to cash, letter from a bank, credit institutions, or other financial intermediary, supporting the availability of liquid financial resources in the amount of **Ksh 14,000,000.00**

2.5 **Site visit:** The offeror, at his own responsibility, cost, 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 quotation and entering into a contract for the construction of works.

2.6 Bidders must quote for all the items of the works. **A partial quote will not be accepted.** If a quotation shows items listed but not priced, their prices shall be assumed to be included in the

prices of other items. An item not listed in the quotation shall be assumed to be not included in the quotation and the quotation shall be rejected as incomplete

- 2.7 Evaluation. The employer shall award the contract to the bidder whose offer has been determined to be the lowest evaluated offer as well as being substantially responsive to the requirements of the request for quotation (RFQ), provided further that the offeror is determined to be qualified to perform the contract satisfactorily in accordance with information requested under paragraph 2.4 above.
- 2.8 Payment. Payment will be made in full within **30 days** of the contractor's submission of each interim payment request against the work successfully completed during the interim period and certified by the Programme Engineer appointed by the employer.
- 2.9 Completion Date. The works shall be completed within **four months** from the date of signature of the contract. The contractor must state exact completion time in its quotation supported by its proposed construction schedule.
- 2.10 Defects Liability. The defects liability period is **Sixty (60) days** from the completion date.
- 2.11 The location:





### **3. Summary of Annexures**

- 2.1 Bill of Quantities
- 2.2 Technical Specifications
- 2.3 Drawings
- 2.4 Contract Agreement
- 2.5 General Conditions
- 2.6 Special Conditions
- 2.7 Mandatory Business Questionnaire
- 2.8 Form of Tender
- 2.9 Tender Security Form

### 3.1 Annex: Bill of Quantities

#### Road spot improvement works leading to Mutuobare store-Construction of two box culverts along 2. Catholic-Kangondo-Muchiri Kiremba Road at Shauri Marikiri River and Kangondo Stream

Item Code	Description	Unit	Quantity	Rate (Ksh)	Amount (Ksh)
<b>Bill No. 1:- General: Office administration and overheads/Preliminaries</b>					
01-80-010	Allow a prime cost of Kshs. 50,000 for material testing as directed by the Engineer	PC SUM	50,000		
01-80-011	Extra over item 01-80-010 for contractors' overheads and profits	%	50,000		
01-80-016	Provide and erect publicity signs as directed by the Engineer	NO.	1		
01-80-030	Allow a prime cost of Kenya Shillings Three hundred thousand (300,000) only for attendance to the RE,s supervisory staff including overtime	PC SUM	300,000		
01-80-031	Include percentage of PC sum in item 01-80-030 for contractors overhead and profit	%	300,000		
01-80-028	Allow a prime cost sum of Kshs. 50,000 for off road Enviromental Mitigation	PC SUM	50,000		
01-80-029	Extra over 01-80-028 for profits and overheads	%	50,000		
	<b>Total for bill 1</b>				
<b>Bill No. 7:- EXCAVATION AND FILLING FOR STRUCTURES</b>					
07-50-001	Excavate for structure in soft material	M <sup>3</sup>	30		
07-50-003	River training in soft material	M <sup>3</sup>	90		
07-50-004	River Diversion	M <sup>3</sup>	120		
07-50-006	Selected granular fill material	M <sup>3</sup>	500		
	<b>Total for bill 7</b>				
<b>Bill No. 10:- GRADING AND GRAVELLING WORKS</b>					
10-50-002	Heavy grading with watering and compaction	M <sup>2</sup>	12000		
10-60-001	Provide gravel wearing course-excavation, free haul, spread and compact	M <sup>3</sup>	500		
	<b>Total for bill 10</b>				

**Road spot improvement works leading to Mutuobare store-Construction of two box culverts along 2. Catholic-Kangondo-Muchiri Kiremba Road at Shauri Marikiri River and Kangondo Stream**

Item Code	Description	Unit	Quantity	Rate (Ksh)	Amount (Ksh)
<b>Bill No. 17:- CONCRETE WORKS (Major Structures)</b>					
17-80-001	Provide and place 50mm thick class 15/20 concrete binding to structures	M <sup>3</sup>	7.56		
17-80-002	Provide and place class 25/20 concrete for retaining walls and other structures	M <sup>3</sup>	60.2		
17-60-003	Vertical formwork class F2 finish	M <sup>2</sup>	120		
17-60-004	Horizontal formwork class F2 finish	M <sup>2</sup>	120		
17-80-004	Provide, cut, bend and fix steel reinforcement of diameter greater, equal to or less than 16mm as per the drawing or as instructed by the Engineer	Kg	7080		
	<b>Total for bill 17</b>				
<b>Bill No. 21:- MISCELLANEOUS BRIDGE/DRIFT WORKS</b>					
21-60-006	Guardrails to bridges	MT	20		
21-60-008	weep holes	NO	40		
	<b>Total for bill 21</b>				
	<b>Total for Works</b>				
	<b>Add 16% Vat</b>				
	<b>Total Contract Sum</b>				
<b>The source of funds shall be the IFAD Loan and GoK for domestic taxes and levies</b>					

## 3.2 Annex 2: Technical Specifications

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

3.2.1.1 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.

3.2.1.2 When the term “Period of Maintenance” has been used in the Standard Specifications, it shall be changed to “Defects Liability Period”

### 3.2.1.3 Extent of Contract

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

- a. Preliminary and General Items
- b. Provide for passage of traffic
- c. Excavation for structure as may be instructed
- d. Provide and place class 15/20 concrete to beds
- e. Provide formwork to provide F2 finish
- f. Vertical formwork class F2 finish
- g. Provide, cut bend and fix into position high yield reinforcement bar to BS 4461
- h. Provide, cutting, shaping and placing high yield, high bond strength bars diameter greater than 16mm
- i. Provide, place and compact class 20/25 concrete to headwalls, wing walls, aprons, surround to walls, inlets and outlets to pipe culverts
- j. Heavy grading of the access road
- k. Provide, Gravel wearing course-excavation, free haul, spread, water and compact.
- l. And any other works as instructed by the Engineer

3.2.1.4 The works shall be executed within the contract period on instruction of the Engineer taking into consideration the rain patterns of the project road and maintenance cycle

### 104 Programme of Execution of the Works

The contractor shall provide the works Programme, required under clause 14 of the Conditions of Contract, within 14 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 fulfil his obligations.

The Contractor shall allow in his Programme for construction of trial sections and carrying out tests upon them as directed by the Engineer in accordance with the provisions of Clause 129 of the Standard Specification. The time for completion of the Contract shall not be extended because of the time taken to carry out tests and evaluate trial sections.

### **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 complete work is achieved.

### **107 Taking Over Certificate**

The minimum length of the road for which a certificate will be issued is the entire length of the project road when substantially completed.

### **109 Notice of Operations**

**Add the following sub- Clause.**

#### **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.

#### **Explosive and Blasting**

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 explosives, ancillary materials and all other items of related kind whatsoever required for blasting.

### **117 Health, Safety And Accidents**

**Add 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 BID 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 is 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 competent surveyors 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.

## **127.2 Trial Sections**

The Contractor shall allow in his Programme for constructing trial sections and carrying out tests upon them as directed by the Engineer. Trials would normally be required at the start of each pavement layer and if changes of materials, method or equipment deem it necessary as directed by the Engineer.

The time for completion of the Contract shall not be extended because of the time needed to construct trial sections and evaluate the tests on them.

At least fourteen days before the work of laying any pavement layer is commenced, the contractor shall construct trial sections of at least 100 m in length and to the full construction width and the specified pavement layer thickness. For each trial section, the Contractor shall use the materials, mix proportions, mixing, laying, compaction plants and construction procedure that he proposes to use for the main work. The main work of laying the pavement layer shall not be commenced until this trial has been tested and approved by the Engineer.

No variation in the construction procedure, mix proportions, size, grading or source of any of the constituents shall be made without the agreement of the Engineer who may first require new trial sections to be carried out.

Trial sections, if found satisfactory, will be paid for under the rates in the Bill of Quantities for the appropriate items, as if the trial sections were part of the normal work. No separate payment will be made for trial sections and testing and the Contractor shall be deemed to have provided for this in his rates.

The Contractor shall make good, at his own expense, any trial sections that fail to meet the specified standards. The standards shall include, but not be limited to, material quality, layer thickness, levels and compaction.

### **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.

### **130 Progress Photographs**

Notwithstanding the provision of Clause 130 of the Standard Specifications, the Contractor shall not be responsible for taking of progress photographs. Progress Photographs shall be taken by the Engineer's Representative and relevant costs charged to the Contractor who will be reimbursed under Miscellaneous Accounts.

### **131 Signboards**

The Contractor shall provide and erect **two (2)** publicity signboards on the site as directed. The Engineer shall, as shown in the Drawings, direct the minimum dimensions of the boards. The signs shall be printed reflective Vinyl Stickers on galvanized steel plates min 350mm high. Posts shall be galvanized steel. Main headings lettering shall be Yellow and min 80mm high, while subheadings lettering shall be White and min 60mm high as per the drawings.

### **137 Attendance upon the Engineer and His Staff**

The Contractor shall pay wages (including all overtime) and house all attendant staff to fulfill the requirements of Clause 137 of the Standard Specification.

The number of junior support staff required by the Engineer shall be about: 4 (four) No. Office attendants, 6 (six) No chainmen, and 6 No. laboratory attendants. The Contractor will be paid on a prime cost basis plus a percentage for overheads and profits under appropriate items in the Bills of Quantities. The payment referred to in this clause shall exclude the cost of maintaining the offices in compliance with clause 137, paragraphs 1, 2 and 4 of the standard specifications which are deemed to be included in the rates for providing the Office.

## 138 Vehicles and Drivers for the Engineer and His Staff and Method of Payment

The Contractor shall **when instructed** to do so provide and maintain in good working condition for the exclusive use of the Engineer and his staff throughout the contract, brand new vehicles, right hand drive, diesel powered and fitted with air-conditioner, CD/mp3 music player, SRS Air bags, power windows, central locking, alarm system, alloy wheels and power steering as described below. The Engineer will approve the type of vehicle and confirm the number of each type to be provided.

### Type 2 with the following specifications;

- Heavy duty, utility passenger vehicle, 4x4, l.w.b., 4000 - 4200cc, diesel.
- Engine type diesel, 4 stroke.
- Engine cooling system, water.
- Piston displacement range - 4000-4200cc
- Maximum power output, (kw/ rpm), min.- 80kw/3800rpm
- Maximum torque developed, (nm/ rpm), min. - 260nm/3400rpm
- Manual transmission.
- Hydraulic, clutch actuation.
- All synchromesh gearbox, with 2 speed reduction transfer gearbox.
- Transmission speeds – 5 speed
- Permanent 4wd or with selector from 2wd to 4wd.
- Differential lock/ freewheeling hubs provided.
- Assisted hydraulic, dual brake system.
- Brakes, disc at front or all round
- Mechanical parking brake, to act on transmission or rear wheels
- Independent heavy duty front and rear suspension.
- Heavy duty leaf or coil springs with telescopic dampers.
- Station wagon - 4 no. Side doors and rear side-swing door station wagon (five door hard top).
- To seat at least 8 adults (including driver) comfortably.
- To be fitted with adequate winding/sliding windows for good ventilation and wide view.

The Contractor shall insure comprehensively the vehicles for any licensed drivers and shall provide competent drivers during normal working hours and whenever required by the Engineer including recognized days of rest.

Should any vehicle supplied not be in road worthy condition, the Contractor shall provide an acceptable equivalent replacement vehicle until such time as the original vehicle is repaired to the satisfaction of the Engineer and returned for use.

Payment for the vehicles (up to 4,000Km per veh.month), shall be by vehicle months. Payment for mileage above 4,000Km per vehicle month, shall be made at a rate per Kilometre. These payments shall be inclusive of all fuels, lubricants, servicing, insurance, maintenance, drivers and repairs. The rate shall include any overtime the drivers might be due or any other allowances in addition to the normal working hours. Payment shall be made under appropriate items in the Bills of Quantities.

## 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 appropriate items in the Bills of Quantities.

### **141 Measurement and Payment**

Delete Sub-Clause 141 (a) entirely and substitute with: -

a) No Preliminary item has been included in this Contract. All Contractor's mobilization and general costs shall therefore be included in relevant rates in the Bill of Quantities.

Delete Sub-Clause 141 (m) entirely

### **Section 2 - Materials and Testing Of Materials**

All materials testing shall be in accordance with Section 2 of the Standard Specifications.

#### **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/lime improved materials

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

#### **301 Setting Out**

a) In addition to the provisions of clause 3.01(a) if the traverse points to be used for the setting out are close to the existing carriageway and interfere with construction works then the Contractor will have to relocate them to a location where they will not be disturbed. The co-ordinates and heights of all traverse points so located shall be listed and provided to the Engineer for checking and/or approval. Contractor shall also monument the new centerline every 200m along straight and all salient points along curves by a pin in the concrete beacon before commencement of any works.

The road reserve boundary posts shall have 12mm diameter steel pins embedded in concrete, 200mm long with 25mm exposed to the air, sticking out from its top surface. This pin shall be coordinated and heighted and result of the same shall be provided to the Engineer for approval. Cost of these works shall be included in the rates as no separate item has been provided.

#### **b) Detailed Setting Out**

Reference pegs shall be 50mm by 50mm in section 600mm long driven 400mm firmly into ground and painted white above the ground. The offset from centre line shall be indicated by small nail 20mm to 25mm long with its head driven flush with the top of the peg. Chainages, offset and reference elevation shall be clearly indicated to the sides of the peg to the satisfaction of the Engineer.

After cutting of benches and prior to commencement of earthworks or subgrade works, Contractor shall take cross-sections again and submit the copy of the same to Engineer for agreement. These cross-sections shall then be used as basis of measurement for all subsequent layers, unless otherwise stated.

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

### **401 Site Clearance**

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

### **Removal of Topsoil**

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

## **SECTION 5 - EARTHWORKS**

### **504 Preparation Prior to Forming Embankment**

In cuttings, the contractor shall excavate to a level that would accommodate the 300mm subgrade and the existing ground below this **MUST** be processed and compacted in accordance with clause 504 of the standard specifications

### **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 with CBR Values of less than 2%
- (ii) All material containing more than 5% by weight of organic matter (such as topsoil, material from swamps, mud, logs, stumps and other perishable material)
- (iii) All material with a swell of more than 3% (such as black cotton soil)
- (iv) All clay of plasticity index exceeding 50.
- (v) All material having moisture content greater than 105% of optimum moisture content (Standard Compaction)

### **Subgrade**

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 in soft material”.

The material for subgrade for a road section shall have an average CBR of not less than 14% with no value being less than 10% 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%. Where the *in situ* material does not meet this criterion, it shall be excavated and cart to spoil to a depth that can accommodate a new 300mm improved subgrade.

No extra payment will be made for haulage of suitable material from borrow pits as the overhaul costs shall be deemed to have been factored in the rates inserted in the Bills of Quantities

### **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 (up to 100m away from structure), all fill above ground level up to the underside of the subgrade shall be compacted to density of 105% 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 wingwalls.

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, the material shall have a CBR greater than 14% and this shall be compacted and finished to the same standards and tolerances as those required for normal subgrade and clauses in the specifications applying to normal subgrade shall also apply.

### **509 Mass-Haul Diagram**

Delete Clause 509 entirely and substitute “No Mass-Haul diagram has been provided with the Documents. The Contractor shall be responsible for locating suitable materials for constructing earthworks along the alignment and elsewhere and shall include in his rates for fill, spoil and for the cost of haulage”.

### **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**

Whenever excavation works in side drains constitutes a separate operation from the bulk earthworks, such excavation shall be classified as catch water drains under Section 8 of the Specifications

### **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).

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

### **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 Excavations 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 be carried out in accordance with Clause 710 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 KCEP-CRAL Regional offices.

### **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 insitu material. The insitu 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 10: GRADING AND GRAVELLING

### Scope:

Grading covers the works involved in the reinstatement of the carriageway to the camber by removing the high points and filling up gullies corrugations and wheel ruts to restore smooth running surface. Graveling consists of excavation, loading hauling and spreading of gravel wearing course material on the formation of carriageway. Gravel shall include lateritic gravel, quartzitic gravel, calcareous gravel, decomposed rock, soft stone coral rag, clayey sand and crushed rock.

The material may be obtained from borrow pits or excavation in cuttings. Gravel material shall conform to the requirement given in Table 10.1

**Table 10.1: Requirement for Gravel Wearing Course**

GRADING REQUIREMENTS AFTER COMPACTION		PLASTICITY INDEX REQUIREMENTS PI			
Sieve (mm)	% by Weight Passing	Zone	Min	Max	
40	100	WET	5	20	
28	95-100	DRY	10	30	
20	85-100	<b>BEARING</b>	<b>STRENGTH</b>		
14	65-100	Traffic VPD	CBR	DCP	Equivalent
10	55-100			mm/Blow	
5	35-92	Greater than 15	20	11	
2	23-77	Less than 15	15	14	
1	18-62	CBR at 95% at MDD, Modified AASHTO and 4 days soak			
0.425	14-50	Lower quality material (CBR 15) may be accepted if no better material can be found			
0.075	10-40				

NB: Wet Zone - mean annual rainfall greater than 500 mm.

Dry zone - mean annual rainfall less than 500 mm.

Alternative sources of gravel material whose quality can be shown to be in compliance with the specification requirements may be used, with the proviso that the Employer is not to incur additional expenses in connection with its winning and haulage. Contractor is deemed to have included in his rates for the provision of the gravel material to have included the cost of complying with the testing requirements.

## **1001 Removal of Overburden**

The Item consists of excavation of overburden including loading, hauling and stockpiling at the approved locations. The thickness of the overburden layer to be removed shall be determined from the depths of the trial pits dug at a 30m grid within the quarry area.

The overburden shall be removed and deposited neatly in order to use it again to reinstate the quarry at the end of improvement work.

### **Work Method:**

The contractor shall use **labour** or **equipment** to carry out this item of work

### **Quality Control**

The location and manner of stock piling of the overburden for the reinstatement of the quarry shall be visually checked

### **Measurement and Payment**

No separate measurement and payment shall be made for removal of overburden and contractor shall be deemed to have allowed in his rates and prices for the cost

## **1002 Excavation of Gravel**

The gravel shall be excavated from quarries approved by the Engineer. It is the Contractors obligation to inform the Engineer in the case that the quality / availability of the gravel changes during the course of excavation.

Oversize stones and boulders shall be removed from the excavated gravel and deposited outside the quarry at locations approved by the Engineer. Such stones and boulders may be reused for structures and scour checks

### **Work Method**

#### **I. Labour based methods**

The contractor shall excavate and stockpile the gravel in bays for efficient loading by labour.

#### **II. Equipment methods**

The Contractor shall excavate the gravel and stockpile in heap(s) for the efficient loading by equipment.

### **Quality Control**

- The widths of the loading bays shall be checked before excavation can commence.
- The loading bays shall be checked to ensure it is free draining.

### **Measurement and Payment**

No separate measurement and payment shall be made for excavation of gravel and contractor shall be deemed to have allowed in his rates and prices for the cost.

### 1003 Haulage

This activity involves loading of excavated gravel, haulage by appropriate equipment and off-loading of the same as specified in the drawings or as directed by the Engineer. Where the loads delivered in any load falls short of agreed equipment capacity, dumping shall not be permitted unless the agreed spacing is adjusted accordingly.

Where loads supplied are found to contain material other than from the approved quarry and thus of unacceptable quality, the Engineer shall cause them to be removed from site at the contractor's expense.

#### Work Method

The Contractor shall use a combination of both Labour and equipment to carry out this Item work.

#### Quality Control

- No haulage equipment shall be used unless its capacity has been ascertained the Engineer.
- The quality of gravel dumped on the carriageway/carriageway shall be visually checked daily.
- The quantity of material delivered in each load shall be checked before dumping is allowed.
- The distance between the stacks shall be checked using tape measure.

#### Measurement and Payment

No separate measurement and payment shall be made for haulage of gravel and contractor shall be deemed to have allowed in his rates and prices for the cost.

### 1004 Spreading and compaction of gravel

#### i. Labour methods ii. Equipment methods

This activity involves spreading gravel material, shaping to ensure uniform thickness of the layer across the full width of the carriageway and to the specified camber. Spreading also includes, removing any oversized stones or boulders which cannot be broken down to required size, spoil dump.

Where water needs to be added, it shall be applied in an even manner and the rate of application shall be such that no transverse or longitudinal flows occur. Unless otherwise instructed by the Engineer, the moisture content shall be within the range of +/- 2% of the optimum moisture content. Compaction will be carried out as specified in 5.05.

#### Work Method

The Contractor shall use **Labour** or Equipment to carry out this Item work.

#### Quality Control

- The gravel surface width shall be checked at every 100m interval using tape measure and shall have tolerance of + / - 50mm.
- Trial holes at every 100m shall be used to check the gravel surface thickness and shall have a tolerance of + 5mm / - 0mm.

- The camber cross fall shall be checked at every 50m and the maximum tolerances shall be + / - 1 %
- The longitudinal profile shall be checked with every load to ensure a smooth surface with no corrugations or depressions

**Measurement: m3**

The unit of measurement shall be in cubic metres of compacted material on carriageway

**Payment**

The unit rate shall be the full compensation for labour, tools, equipment and any incidental costs required for carrying out the work.

**1006 Carriageway Grading**

**i) Light Grading**

This activity shall consist of trimming of the carriageway to control roughness and corrugations using either a towed grader or a motorized grader. The width of the carriageway shall be as specified in the drawings or as directed by the Engineer.

The material shall be bladed toward the center of the carriageway starting from both edges to the specified camber.

**Work Method**

The contractor shall use equipment to carry out this item work.

**Quality Control**

- The width of the carriageway shall be checked using tape measure at every 10m with tolerance of +50mm or -20mm.
- The camber shall be checked using camber board at every 5m with and shall have a tolerance of +/- 1%

**Measurement: m2**

The unit of measurement shall be square metres of carriageway graded.

**Payment**

The unit rate shall be the full compensation for labour, equipment and any incidental costs required for carrying out the work.

**ii) Heavy Grading and Compaction**

This activity shall consist of scarifying of the existing carriageway/carriageway surface, cutting high spots and moving materials to fill potholes, corrugations and wheel ruts and reshaping of the surface to the specified camber, using either towed or motorized grader. All loose rocks, roots grasses shall be removed and disposed well clear of the drains.

Pegs 300 to 400mm shall be placed at 10 to 20 m intervals to mark edge of the carriageway.



The material shall be bladed toward the center of the carriageway starting from both edges until the specified camber is achieved. Compaction will be carried out as specified in 5.05.

#### **Work Method**

The contractor shall use equipment to carry out this item work.

#### **Quality Control**

□ The width of the carriageway shall be checked using tape measure at every 10m with tolerance of + 50mm or -20mm.

The camber shall be checked using camber board at every 5m with and shall have a tolerance of +/- 1%

#### **Measurement: m2**

The unit of measurement shall be square metres of carriageway graded.

#### **Payment**

The unit rate shall be the full compensation for labour equipment and any incidental costs required for carrying out the work.

### **1007 Restoration of Quarries and Borrow pits**

The ground shall be levelled, topsoil hauled back and uniformly spread over the entire exposed/excavation area.

Adequate drainage provisions shall be made to protect excavation areas. Where necessary appropriate protection measures may be taken to avoid erosion of the spread topsoil layer. Grass and trees may be replanted as directed by the Engineer.

#### **Work Method**

The Contractor may choose Labour, Equipment or a combination of both to carry out this Item depending on the degree of difficulty of the work.

#### **Quality Control**

The Engineer shall check that the required measures have been satisfactorily taken.

#### **Measurement and Payment**

No separate measurement and payment shall be made for restoration of quarries and borrow pits and contractor shall be deemed to have allowed in his rates and prices for the cost.

## **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.

#### **Materials**

Selected rock: The selected rock builders 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 levelling 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.

#### **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 wingwalls inclusive of Cost of Form works.

### **1703 (C) FORMWORK FOR CULVERT WALLS**

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 that 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.

### **1703(D) Concrete Works (Class 20/20) 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 20/20 shall be used for Culvert walls and slabs.

#### **a) Concrete Materials**

(i) 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 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.

**(b) Aggregates**

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

Grading of aggregates shall conform to the following requirements:

**(i) Grading of Fine Aggregates**

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

**(ii) Grading of Coarse Aggregates**

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

**(v) 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.

**(vi) 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 20/20**

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

Design compressive strength (28 days): 20N/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.

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

**(iii) Mixing and delivery**

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

**(iv) Concrete in hot weather**

No concrete shall be placed when the ambient air temperature is expected to exceed thirty three degrees celsius (33°C) during placement operations).

(v) 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.

(vi) 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.

(f) Measurement and Payment

Measurements for the Concrete Works Class 20/20 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 20/20) 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.

## **SECTION 20 - ROAD FURNITURE**

### **2011 BOLLARDS**

Where directed by the Engineer, the contractor shall provide and install class 20/20 200mm diameter reinforced concrete bollards concreted 300mm into the ground.

## **SECTION 15: SUPERVISION AND CONTRACT EVALUATION MANUAL 2012**

The Manual refers to the Ministry of Roads 'Supervision and Contract evaluation Manual for road Maintenance Works 2012.

## 1. SECTION VI: BILLS OF QUANTITIES

- 1.1 The Bill of Quantities shall form part of the Contract Documents and is to be read in conjunction with the Instructions to Tenderers, Conditions of Contract Parts I and II, Specifications and Drawings.
- 1.2 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.
- 1.3 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 tendering and comparing of Tenders. 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 fulfillment of his obligation under the Contract.
- 1.4 The prices and rates inserted in the Bills of Quantities will be used for valuing work executed, and the Engineer will measure the whole of the works executed in accordance with this Contract.
- 1.5 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 Tenderers 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. Tenderers who fail to comply will be disqualified.
- 1.6 Provisional sums (including Day works) 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 of the Conditions of Contract.
- 1.7 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 or works, overheads and profits, taxes and duties (excluding VAT) 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.
- 1.8 Errors will be corrected by the evaluation committee for any arithmetic errors in computation or summation as follows:
  - (a) Where there is a discrepancy between amount in words and figures, the amount in words will govern; and
  - (b) Where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in the unit price, in which event the total amount as quoted will govern and the unit rate will be corrected.
  - (c) If a Tenderer does not accept the correction of errors as outlined above, his Tender will be rejected.

- 1.9 The whole cost of complying with the provisions of the Contract shall be included in the Items provided in the priced Bill of Quantities, and where no Items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
- 1.10 “Authorized” “Directed” or “Approved” shall mean the authority, direction or approval of the Engineer.
- 1.11 The method of measurement of completed work for payment shall be in accordance with Standard Specification for Road and Bridge Construction of the Ministry of Transport and Communications, 1986.
- 1.12 Unless otherwise stated, all measurements shall be net taken on the finished work carried out in accordance with the details shown on the drawings or instructed, with no allowance for extra cuts or fills, waste or additional thickness necessary to obtain the minimum finished thickness or dimensions required in this contract. Any work performed in excess of the requirements of the plans and specifications will not be paid for, unless ordered in writing by the Engineer
- 1.13 The Bills of Quantities, unless otherwise expressly stated therein, shall be deemed to have been prepared in accordance with the principles of the latest edition of the Civil Engineering Standard Method of Measurement (CESMM).

1.14 Units of Measurement and abbreviations used herein shall have the following meanings:

Unit	Abbreviation	Unit	Abbreviation
cubic meter	m <sup>3</sup> or cu m	millimeter	mm
hectare	Ha	month	mth
hour	Hr	number	No
kilogram	Kg	provisional sum	P.S
kilometre	Km	square meter	m <sup>2</sup> or sq m
lump sum	L.S	square millimeter	mm <sup>2</sup> or sq m
meter	M	vehicle	veh
metric ton (1,000 kg)	T	week	wk
months	mths		

- 1.15 Hard material, in this Contract, shall be defined as the material which, in the opinion of the Engineer, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for their removal, and which cannot be extracted by ripping with a dozer tractor of at least 150 brake horse power (112 kilowatt) with a single, rear-mounted, hydraulic ripper. Boulders of more than 0.2m<sup>3</sup> occurring in soft material shall be classified as hard material.
- 1.16 Soft material shall be all material other than hard material.



### 3.3 Annex 4: Contract Agreement

This contract (hereinafter called “the Contract”) is made on the \_\_\_\_\_ day of \_\_\_\_\_ 2021 between **Ministry Of Agriculture, Livestock, Fisheries and Cooperatives, State Department for Crop Development and Agricultural research on behalf of Kenya Cereal Enhancement Programme-Climate Resilient Agricultural Livelihoods Window (KCEP-CRAL) of P.O. Box 30028-00100 Nairobi** whose registered office is situated at **Kilimo House along Cathedral Road** (hereinafter referred to as “the Client”) whose expression shall where the context so admits include its successors, administrators or permitted assignees on the one part

**AND**

\_\_\_\_\_ of \_\_\_\_\_ (hereinafter called “the Contractor”) whose Certificate of Registration is \_\_\_\_\_ and whose registered office is situated at \_\_\_\_\_ on the other part (hereinafter the ‘Contractor’ whose expression shall where the context so admits include its successors, administrators or permitted assignees) on the other part.

**WHEREAS** the Client invited tenders through National Shopping Bid and is desirous that the contractor execute the **Spot Improvement works for \_\_\_\_\_: reference \_\_\_\_\_** and the contractor has accepted to execute the \_\_\_\_\_ facility located in \_\_\_\_\_ or a total contract sum price of \_\_\_\_\_ **inclusive of taxes** and the remedying of any defects therein for a defects Liability Period of six (6) months (hereinafter called “the **contract price**) as shown below in the summary of the Bill of Quantities:

#### **NOW THIS CONTRACT WITNESSETH AS FOLLOWS:**

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following Annexes attached hereto shall be deemed to form an integral part of this Contract. The Contract shall prevail over all Annexes. In the case of discrepancies or inconsistencies among the Annexes, the documents to prevail shall be given precedence in the following order:
  - a) Special Conditions of the contract
  - b) General Conditions of Contract
  - c) Priced Bill of Quantities
  - d) Specifications
  - e) Drawings
  - f) Form of Tender
  - g) Letter of Notification of Award
  - h) The Acceptance of the award
  - i) The bidders tender document

3. In consideration of the payments to be made by the Client to the contractor as hereinafter mentioned, the contractor hereby covenants with procuring entity to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Client hereby covenants to pay the contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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

For and on behalf of Ministry Of Agriculture, Livestock, Fisheries and Cooperatives, State Department of Crop Development and Agricultural Research, Kenya Cereal Enhancement Programme-Climate Resilient Agricultural Livelihoods Window:

\_\_\_\_\_

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

**WITNESSED BY:**

\_\_\_\_\_

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

**For and on behalf of the Contractor**

\_\_\_\_\_

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

**WITNESSED BY:**

\_\_\_\_\_

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

## 3.4 Annex 5: General Conditions

### 3.4.1

#### Definitions

- (a) The “contract” is the contract between the employer and the contractor to execute, complete, and correct defects in the works as described in the specifications and drawings. The name and identification number of the contract is given in the RFQ (Request for Quotations).
- (b) “Bill of quantities” is the contract’s priced schedule providing estimates of quantities for each item of work which in its entirety forms the whole of the works.
- (c) “Activity schedule” is the contract’s priced and completed schedule of activities to be undertaken by the contractor for executing the whole of the works in lump sum contracts.
- (d) The “completion date” is the date of completion of the works as certified by the project supervision officer.
- (e) The “intended completion date” is the date by which the contractor shall complete the works as stipulated in the contract and as may be revised only by the employer by issuing an extension of time in writing.
- (f) The “contractor” is a person or corporate body whose quotation to carry out the works has been accepted by the employer.
- (g) The “employer” is the legal entity on whose behalf this RFQ is issued and is the party who signs the contract with the “contractor” and appoints the project supervision officer.
- (h) The “project supervision officer” is the person named by the employer to act on his behalf, within the limits of authority delegated to such person and communicated to the contractor, for supervision of the works performed by the contractor and administering the contract.
- (i) The “initial contract price” is the price stated in the notification of award and the “contract price” is the initial contract price as adjusted thereafter in accordance with the provisions of the contract.

- (j) Days are calendar days; months are calendar months.
- (k) A defect is any part of the works not completed in accordance with the contract.
- (l) The defects liability period is 6 months counted from the completion date.
- (m) Equipment is the contractor's machinery and vehicles brought temporarily to the site to construct the works.
- (n) Materials are all supplies, including consumables, to be incorporated in the works.
- (o) "Specification" means the specification of the works included in the contract and any modification or addition made or approved by the employer.
- (p) The "site" is construction works of \_\_\_\_\_
- (q) The "start date" is the latest date when the contractor, having been given access to the site, shall commence the execution of the works.

<b>3.4.2</b>	<b>Language and law</b>	The ruling language of the Contract shall be English language and the law governing the Contract shall be the law of the Republic of Kenya
<b>3.4.3</b>	<b>Communications</b>	Communications between the parties shall be effective only when made in writing. A notice shall be effective only when it is delivered
<b>3.4.4</b>	<b>Contractor's risks</b>	From the starting date until the Programme Engineer issues a certificate for the correction of defects at the end of the defects liability period, the risks of personal injury, death, and loss or damage to property and adjacent property (including, without limitation, the works, materials and equipment) are contractor's risks
<b>3.4.5</b>	<b>Employer's risks</b>	All risks which are not contractor's risks shall be the employer's risks.
<b>3.4.6</b>	<b>Works to be completed by the intended completion date.</b>	The contractor shall commence execution of the works on the start date and shall carry out the works in accordance with the work schedule submitted by the contractor, as updated with the approval of the

project supervision officer and complete the works by the intended completion date.

- 3.4.7 Health and safety.** The contractor shall be responsible for the safety of all activities on the site.
- 3.4.8 Extension of the completion date.** The Programme Engineer through procurement shall extend the completion date if an event, which is not a contractor's risk, occurs or a variation order is issued by the employer which makes it impossible for completion to be achieved by the intended completion date.
- 3.4.9 Delays ordered by the project supervision officer** The Programme Engineer / project supervision officer may instruct the contractor to delay the start or progress of any activity within the works. Delays or suspension of work by the project supervision officer which increases the contractor's costs shall be subject to equitable compensation by the employer
- 3.4.10 Defects.** The project supervision officer shall give notice to the contractor of any defects before the end of the defects liability period, which starts as of the completion date. Every time notice of a defect is given, the contractor shall correct the notified defect within the length of time specified in the project supervision officer's notice. Should the contractor not remedy a defect within the time specified in the project supervision officer's notice, the project supervision officer shall assess the cost of having the defect corrected, and the contractor shall pay this amount, or the employer shall deduct such amount from the amounts due to the contractor.
- 3.4.11 Program.** Within seven (7) days of the written notification of award, the contractor shall submit to the project supervision officer for approval a program showing the general methods, sequence and timing for all activities of the works. The project supervision officer's approval of the program shall not alter the contractor's obligations. The contractor shall revise the program and submit it to the project supervision officer whenever actual progress is different from the approved program
- 3.4.12 Changes in quantities** The contractor shall carry out all the activities and complete the works in accordance with the scope of

work specified in the contract and the quoted prices in the bill of quantities or the activity schedule. Unit prices quoted by the contractor shall not be subject to any changes.

**3.4.13 Interim payment certificate**

The project supervision officer shall check the contractor's executed work and issue a payment certificate certifying the amount to be paid to the contractor less the deductions as per paragraph 16 below. The value of the work executed shall be calculated as per the unit rates for such items of work in the bill of quantities or the activity schedule.

**3.4.14 Payments.**

Interim payments shall be adjusted for reimbursement of the advance payment. The employer shall pay the contractor the amounts certified by the project supervision officer within thirty (30) days of the date of each certificate. If the employer delays the payment, the contractor shall be entitled to be paid interest on the late payment. Interest shall be calculated from the date by which the payment should have been made, up to the date when the late payment is made, at the rate of interest of **0.05%**.

**3.4.15 Payment of Retention Money and Defects Liability Period**

A retention amounting to the 10% of the total Bid shall be made by the Engineer in the first and the following Interim Payment Certificates until the amount retained shall reach the "Limit of Retention Money which is 10%.

Upon the issue of the Taking-Over Certificate, with respect to the whole of the works one half of the retention money shall become due and shall be paid to the Contractor when the Engineer shall certify in writing that the last section of the whole works has been substantially completed.

Upon expiration of the Defects Liability Period for the works, the other half of the Retention Money shall be certified by the Engineer for payment to the Contractor.

The defects liability period shall be six (6) months.

**3.4.16 Taxes**

The contractor is responsible for all taxes in accordance with the applicable taxation laws in the Republic of Kenya

- 3.4.17 Advance payment.** The employer may make an advance payment to the contractor in the amount of not more than twenty per cent of the initial contract price] after the contractor has provided an advance payment bank guarantee for an equal amount. The advance payment shall be repaid by the contractor through deduction of proportionate amounts from payments otherwise due to the contractor. Full repayment of the advance payment shall be made when 75% of the initial contract price has been certified for payment
- 3.4.18 Completion and taking over** The contractor shall request the project supervision officer to issue a certificate of completion of the works, and the project supervision officer will issue such a certificate when it determines that the works are satisfactorily completed. The employer shall take possession of the site within seven (7) days of the project supervision officer's issue of the certificate of completion of the works
- 3.4.19 Final account.** The contractor shall provide the project supervision officer with a detailed account of the total amount that the contractor considers payable under the contract before the end of the defects liability period. The project supervision officer shall issue a defects liability certificate after the contractor has fulfilled its obligations under the contract and shall certify any final settlement/payment that is due to the contractor within fifteen (15) days of receiving the contractor's account if it is correct and complete. If it is not, the project supervision officer shall issue within fifteen (15) days a schedule that states the scope of the corrections or changes that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the project supervision officer shall decide on the amount payable to the contractor and issue a final payment certificate
- 3.4.20 Termination.** The employer or the contractor may terminate the contract by written notice if either party causes a fundamental breach of the contract. Fundamental breaches of contract shall include, but shall not be limited to, the following:

- a. the contractor stops works for ten (10) days when the stoppage has not been authorized by the project supervision officer; or
  - b. a payment certified by the project supervision officer is not paid by the employer to the contractor within forty-five (45) days of the date of the issue by the project supervision officer of the corresponding payment certificate; or
  - c. the project supervision officer issues notice to the contractor that the latter has failed to correct a defect at the expiry of twenty-one (21) days from the date in which the correction should have been undertaken as per the notice by the project supervision officer; or
  - d. the contractor has delayed the completion of the works by more than thirty (30) days; or
  - e. if the contractor or any of its personnel or agents, or its sub-contractors, sub-consultants, suppliers, or any of their agents or personnel, is found to have engaged in prohibited practices as defined in the IFAD Revised Policy on Preventing Fraud and Corruption in its Operations and Activities in any IFAD-funded or IFAD-managed activity or operation, including in competing for, or performing its obligations under the contract; or
  - f. If the contractor is found to have engaged in acts of Sexual Harassment, Sexual Exploitation and Abuse arise out of or in connection with the performance of the contract.
- 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 a-g above the Project Manager shall decide whether the breach is fundamental or not.
  - Notwithstanding all of the above, the Employer may terminate the Contract for convenience.
  - Upon receipt of such notice, the contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this contract agreement



- 3.4.21 Force majeure** Either party may terminate the contract by giving a thirty (30) days' written notice to the other for events beyond that party's control, such as wars and acts of god such as earthquakes, floods, fires, etc
- 3.4.22 Payment upon termination** If the contract is terminated because of a fundamental breach of contract by the contractor, the project supervision officer shall issue a certificate for the value of works completed and for materials already delivered on site minus the advance payments received up to the date of the issue of the certificate minus the deductions as per the applicable delay damages. 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 to the employer and the employer can also use the proceeds of the performance security to settle such contractor's debt
- 3.4.23 Dispute settlement** The employer and the contractor shall make every effort to resolve amicably by direct negotiations any disagreement or dispute arising under or in connection with the contract. In case of continued disagreement either party can take the matter to litigation in accordance with the law governing the contract
- 3.4.24 Performance security.** A performance security, in the form of a bank guarantee, shall be provided by the contractor in the amount specified in this RFQ. It shall be valid until a date twenty-eight (28) days from the intended completion date. The performance security shall be replaced by a new security at the completion date in the form of a bank guarantee covering 50% (fifty percent) of the amount of the performance security to cover the defect liability period. The new security shall be calculated based on the final contract value.
- 3.4.25 Insurance.** 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. The insurance policies must provide coverage against the following events which are due to the contractor's risks.

- a. loss of or damage to the works, equipment, plant and materials [110% of the contract price];
- b. loss of or damage to property (except the works, plant, materials, and equipment) in connection with the contract of Ksh 300,000.00 to cover a potential loss scenario]; and
- c. Personal injury or death to the contractor's or employer's personnel [Ksh 100,000.00].
- d. Third party liability [Ksh 100,000.00].

**3.4.26 Delay damages**

The contractor shall pay 5% for every day of delayed completion beyond the intended completion date. The ceiling amount of such delay damages shall not exceed

**3.4.27 Prohibition of fraud and corruption.**

- a. The contractor shall abide by and perform the contract in compliance with the Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations (hereinafter, "IFAD's Anticorruption Policy") . Failure to comply with this policy may lead to termination of contract as set out above at para. 19(e).
- b. In accordance with IFAD's Anticorruption Policy, the Fund has the right to sanction firms and individuals, including by declaring them ineligible, permanently or for a stated period of time, to participate in any IFAD-funded or IFAD-managed activity or operation (debarment). The Fund also has the right to recognize debarments by other International Financial Institutions in accordance with its Anticorruption Policy.
- c. The contractor will take appropriate measures to inform potential sub-contractors, sub-consultants, suppliers, agents and any of its agents or personnel of their obligations under IFAD's Anticorruption Policy and require their compliance with this policy in connection with their involvement in competing for, or executing, this contract.
- d. The contractor is required to complete and sign the attached self-certification form. In particular, the contractor is obliged to disclose relevant prior sanctions and criminal convictions and any commissions or fees paid or are to be paid to any agents or other party in connection with this procurement process or the execution of the contract.

- e. The contractor is required to fully cooperate with any investigation conducted by the Fund, including by making personnel available for interviews and by providing full access to any and all accounts, premises, documents and records (including electronic records) relating to this contract or the relevant procurement process and to have such accounts, premises, records and documents audited and/or inspected by auditors or investigators appointed by the Fund.
- f. The contractor shall keep all records and documents, including electronic records, relating to this contract, its execution and/or the corresponding bidding process available for a minimum of three (3) years after completion of the execution of the contract.

**3.4.28 Prohibition of sexual harassment, sexual Exploitation and abuse**

The contractor expressly agrees to abide by and to perform the contract in compliance with IFAD's Policy on Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse, which is an integral part of these conditions of contract. The supplier shall take all appropriate measures to prevent and prohibit sexual harassment and sexual exploitation and abuse on the part of its personnel and subcontractors or anyone else directly or indirectly employed by the supplier or any of its subcontractors in the performance of the contract.

The contractor shall immediately report to the employer or IFAD any incidents of sexual harassment and sexual exploitation and abuse arising out of or in connection with the performance of the contract or prior to its execution, including convictions, disciplinary measures, sanctions or investigations. The contractor may take appropriate measures, including the termination of the contract, on the basis of proven acts of sexual harassment, sexual exploitation and abuse arising out of or in connection with the performance of the contract

### 3.5 Annex 6: Special Conditions

#### 3.5.3 Communications

Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified below:

- a) The Engineer's address is:  
P.O. Box 30028- 00100  
NAIROBI  
Email: [kcep.programme15@gmail.com](mailto:kcep.programme15@gmail.com)  
Cc: [tenders.kcepccralprogramme@gmail.com](mailto:tenders.kcepccralprogramme@gmail.com)

- b) The Suppliers Address:

#### 3.5.7 Health and Safety

This contract will be implemented in a manner consistent with IFAD's Social, Environmental and Climate Assessment Procedures (SECAP), available on <https://www.ifad.org/en/secap>

#### 3.5.15 Payment of Retention Money and Defects Liability Period

Retention money shall be 10% of the total contract sum price

#### 3.5.16 Advance Payment

There shall no Advance Payment for this contract

#### 3.5.23 Dispute Settlement

The Parties shall use their best efforts to settle amicably all disputes concerning the interpretation and/or implementation of this Contract through consultations and/or negotiations between the Parties within Thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement.

Where the Parties fail to arrive at an amicable settlement, any dispute, controversy or claim arising out of or in connection to this contract, or breach, termination or invalidity thereof shall be settled by arbitration in accordance with the Nairobi Centre for International Arbitration (NCIA) 'Arbitration Rules, 2015.'

Arbitration shall be by an Arbitral Tribunal comprising three arbitrators. Each Party shall appoint one arbitrator and the third arbitrator who

shall act as president of the Tribunal shall be appointed by the NCIA.

The decision of the Arbitration Tribunal shall be final and binding on the Parties

**3.5.24 The performance Security**

A Performance Security of **10%** of the contract price shall be required

### 3.6 Annex 7: Mandatory Business Questionnaire

**Name of Applicant(s)**.....

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

**You are advised that it is a serious offence to give false information on this form and shall lead to automatic disqualification/termination of your business proposal at your cost.**

#### Part 1 General

Business Name

Location of Business Premises

Email

Nature of Business (Attach Company Profile)

Registration Certificate No. (Attach Copy)

Tax Compliance No (Attach Copy)

Maximum value of business which you can handle at any one time –

Ksh

Name of your bankers

Branch

Bank Account Number

Payment Terms

#### Part 2

##### (a) – Sole Proprietor

Your name in full

Age

Nationality

Country of Origin

Citizenship details

If a Kenyan Citizen, indicate under Citizenship Details whether by Birth, Naturalization or Registration

##### (b) – Partnership

Given details of partners as follows

Name	Nationality	Citizenship Details	Shares
1.....			
2.....			
3.....			
4.....			

If a Kenyan Citizen, indicate under Citizenship Details whether by Birth, Naturalization or Registration

.....

**Part 2 (c) – Registered Company Attach a copy of the CR12**

Private or Public

(Attach brochures or annual reports in case of public companies)

State the nominal and issued capital of company

Nominal Kshs. Issued Kshs.

Give details of all directors as follows

Name	Nationality	Citizenship Details	Shares
1.....			
2.....			
3.....			

**Part 3- List of corporate client customers and their addresses, telephone numbers and contact person.**

1. Company  
Contact Person  
Tel/Mobile
2. Company  
Contact Person  
Tel/Mobile
3. Company  
Contact Person  
Tel/Mobile
4. Company  
Contact Person  
Tel/Mobile

**Part 4-(a) Debarment**

I/We declare that **[insert name of the Bidder]**, its proprietor(s), Agents, Sub-Consultants, Sub-Contractors, Consortium and Joint Venture partners have not been debarred from any procurement process and have not engaged nor shall engage in any fraudulent, corrupt, collusive, coercive or obstructive practices in connection with the present procurement process or any other tender by the KCEP-CRAL and any other public or private institutions.

I/We declare that **[insert name of the Bidder]**, its proprietor(s), Agents, Sub-Consultants, Sub-Contractors, Consortium and Joint Venture partners are not subject to a debarment recognized under the Public Procurement Regulatory Authority and the Agreement for Mutual Enforcement of Debarment Decisions (the 'Cross-Debarment Agreement')<sup>1</sup>

Full Names.....

Signature.....

Dated this .....day of .....2021

In the capacity of.....

Duly authorized to sign Tender for and on behalf of

<sup>1</sup> The Cross-Debarment Agreement was entered into by the World Bank Group, the Inter-American Development Bank, the African Development Bank, the Asian Development Bank and the European Bank for Reconstruction and Development, additional information may be located at: <http://crossdebarment.org/>.

**Part 4-(b) Bankruptcy / Insolvency / Receivership.**

I/We declare that I/We have not been declared bankrupt or insolvent by the competent Authorities in Kenya and neither are we under receivership:

Full Names.....

Signature.....

Dated this .....day of .....2021

Duly authorized to sign Tender for and on behalf of

.....

**Part 4-(c) -Criminal Offence**

I/We,(Name (s) of Director(s)):-

a).....



b).....

c).....

certify that [insert name of the Bidder], its proprietor(s), Agents, Sub-Consultants, Sub-Contractors, Consortium and Joint Venture partners are not subject to a criminal conviction, administrative sanctions and/or temporary suspensions for engaging in fraudulent, corrupt, collusive, coercive or obstructive practices. I/We further certify that [insert name of the Bidder], its proprietor(s), Agents, Sub-Consultants, Sub-Contractors, Consortium and Joint Venture partners have not been convicted of any criminal offence relating to professional conduct or the making of false statements or misrepresentations as to the qualifications of [insert name of the Bidder] to enter into a procurement contract within a period of three (3) years preceding the commencement of procurement proceedings.

Signed.....

For and on behalf of M/s.....

In the capacity of .....

Dated this .....day of .....2021.

Suppliers' / Company's Official Rubber Stamp

.....

**Part 4-(d) Conflict of Interest**

I/We, the undersigned state that I / We have no conflict of interest in relation to this procurement:

a) .....

b) .....

c) .....

Further, I/We declare that [insert name of Bidder], its proprietor(s), Agents, Sub-Consultants, Sub-Contractors, Consortium and Joint Venture partners have no actual or potential conflict of interest<sup>2</sup> that could impact their ability to serve the best interest of the KCEP-CRAL and/or the International Fund for Agricultural Development (IFAD).

For and on behalf of M/s.....

In the capacity of .....

Dated this .....day of .....2021

Suppliers' / Company's Official Rubber Stamp

.....

2 Conflicts of interest arise where private or personal interests of a bidder may influence or appear to influence the impartial and objective performance of their duties. Private or personal interests include situations where a bidder appears to benefit improperly, directly or indirectly, or allows a third party to benefit improperly, from their association with an enterprise or organization that engages in business directly or indirectly with the Project.

**Part 4-(e) – Interest in the Firm:**

Is there any person/persons in KCEP-CRAL or any other public institution who has interest in the Firm?

Yes/No ..... (Delete as necessary)

Institution .....

(Title) (Signature) (Date)

.....

**Part 4-(f) – Gratuities, Fees, Commissions and Gifts:**

I/We, the undersigned certify that no gratuities, fees, commissions, gifts or anything else of value have been paid or exchanged by [insert name of Bidder] or are to be paid or exchanged by [insert name of Bidder] with respect to the present bidding process.

OR

[to be completed only if previous box was not checked]

I/We, the undersigned declare that the following gratuities, fees, commissions, gifts or anything else of value have been exchanged, paid by [insert name of Bidder] or are to be exchanged or paid by [insert name of Bidder] with respect to the present bidding process:

- [Name of Recipient/Address/Date/Reason/Amount]
- [Name of Recipient/Address/Date/Reason/Amount]
- [Name of Recipient/Address/Date/Reason/Amount]

**Part 5(I) – Experience**

Please list here below similar projects accomplished or companies / clients you have supplied with similar items or materials / services in the last 5 years

#	Company Name	Contract/ Order No	Value	Contact Person	Email	Phone Number
1.						
2.						
3.						
4.						
5.						

**Part 6(i or j) – Bank account details:**

AGPO firms must provide evidence from their bank that the account to which KCEP-CRAL shall make payment has a youth or a woman or a PWD listed in the CR12 form/partnership deed/sole proprietor certificate as a MANDATORY signatory of that account,

- Sec.157 (11) of PPADA:

Account No.....

Name of the person(s) in the CR12 form OR in the partnership deed OR in the sole proprietor

Certificate...../.....

ID No(s):...../.....Signature and stamp of the authorized Banker

**Part 7—Declaration**

I/We the undersigned certify that I/We are the authorized representative of **[Name of the Bidder]**, as well as that the information provided above is true and accurate in all material respects and understand that any material misstatement, misrepresentation or failure to provide the information requested in this certification may result in sanctions and remedies, including the permanent ineligibility to participate in IFAD-financed and/or IFAD-managed activities and operations, in accordance with the IFAD Project Procurement Guidelines, the IFAD Procurement Handbook and other applicable IFAD policies and procedures, including **IFAD’s Policy on Preventing Fraud and Corruption in its Activities and Operations** (accessible at [www.ifad.org/anticorruption\\_policy](http://www.ifad.org/anticorruption_policy)), as may be amended from time to time. Furthermore, I/We give KCEP-CRAL permission to seek any other references concerning my/our company from whatever sources deemed necessary (e.g. company registrar’s office, banks etc.).

Full name/s

.....

Signature/s.....

For                      and                      on                      behalf                      of                      M/s

.....

In the capacity of

.....

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

3.6.1 Annex 8: Form of Tender

**(Mandatory)**

To: Kenya Cereal Enhancement Programme-Climate Resilient Agricultural Livelihoods Window of P.O. Box 30028-00100 Nairobi

TENDER NAME	NATIONAL SHOPPING TENDER FOR SPOT IMPROVEMENT WORKS LEADING TO MUTUOBARE GRAIN STORAGE FACILITY IN EMBU COUNTY
TENDER REFERENCE NO	MOALF&C/SDCD&AR/KCEP-CRAL/PROC/088/2021-2022

Dear Sir,

- 1) Having examined the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above-named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of:

(Insert amount in words)  
 .....  
 .....

(Insert amount in figures).....  
 .....

As specified in the Appendix to Bid or such other sums as may be ascertained in accordance with the said Conditions.

- 2) We undertake, if our bid is accepted, to commence the works within Fourteen (14) days of receipt of the Engineer’s order to commence, and to complete and deliver the whole of the works comprised in the contract within the time stated in the Appendix to Bid.
- 3) If our bid is accepted we will, when required, obtain the guarantee of a Bank or other sureties (to be approved by you) to be jointly and severally bound with us in a sum not exceeding 10% of the above named sum for the due performance of the contract under the terms of a Bond to be approved by you.
- 4) We agree to abide by this Tender for a period of [number] **120** days from the date fixed for tender opening of the Instructions to Tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- 5) We understand that you are not bound to accept the lowest or any bid you may receive.
- 6) The Tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be subject of correction, adjustment or amendment in any way by any person or entity.
- 7) On the basis of our previous experience we are fully experienced and competent in the type of work included in this tender and we have adequate financial resources to carry out the

works described within the period for completion. We are in a position to fulfil the contract for which we have tendered

- 8) Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof and signing of the contract by the accounting officer or an officer authorized in writing by the accounting officer shall constitute a binding Contract between us.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_

duly authorized to sign tenders for and on behalf of

\_\_\_\_\_ *[Name of Tenderer]* of

\_\_\_\_\_ *[Address of Tenderer]*

(Name of Witness).....

(Signature of Witness).....

(Address of Witness).....

(Occupation of Witness).....

**3.6.2 Annex 9: FORM OF TENDER SECURITY (Mandatory)**

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

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

THE CONDITIONS of this obligation are:

1. If after tender opening the Tenderer withdraws his tender during the period of tender validity specified in the instructions to Tenderers  
Or
2. If the Tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
  - (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;
  - (c) Rejects a correction or an arithmetic error in the tender.
3. We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.
4. This guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the said date.

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

\_\_\_\_\_ [signature of the Bank]

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

\_\_\_\_\_ [seal]

(Amend accordingly if provided by the Insurance Company)

### 3.6.3 Annex 10: FORM FOR DISCLOSURE OF INTEREST

**[Mandatory To be completed by Tenderer]**

Interest of the Firm in the Procuring Entity.

- i) Are there any person/persons in KCEP-CRAL who has/have an interest or relationship in this firm?

Yes/No.....

If yes, provide details as follows.

	Names of Person	Designation in the Procuring Entity	Interest or Relationship with Tenderer
1			
2			
3			

- ii) Conflict of interest disclosure

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Quotation has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the quotation of another tenderer, or influence the decisions of the Procuring Entity regarding this quotation process.		
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the quotation.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Quotation Document.		
7	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who are directly or indirectly involved in the preparation of the Quotation document or specifications of the Contract, and/or the Quotation evaluation process of such contract.		
8	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who would be involved in the implementation or supervision of the Contract.		
9	Has the conflict stemming from such relationship stated in item 7 and 8 above been resolved in a manner acceptable to the Procuring Entity throughout the quotation process and execution of the Contract?		

**Certification:** On behalf of the Tenderer, I certify that the information given above is complete, current and accurate as at the date of submission.

Full Name Title or Designation

\_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)



### 3.6.4 Annex 11: CERTIFICATE OF INDEPENDENT QUOTATION DETERMINATION

#### ***[Mandatory to be completed by Tenderer]***

I, the undersigned, in submitting the accompanying Letter of quotation to the Kenya Cereal Enhancement Programme – Climate Resilient Agricultural Livelihoods Window (KCEP-CRAL) for:

the \_\_\_\_\_ in response to the request for tenders made by:

\_\_\_\_\_  
*[Name of Tenderer]* do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of \_\_\_\_\_ *[Name of Tenderer]* that:

1. I have read and I understand the contents of this Certificate;
2. I understand that the Tenderer will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the quotation on behalf of the Tenderer;
4. For the purposes of this Certificate and the quotation, I understand that the word “competitor” shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
  - a) has been requested to submit a quotation in response to this request for quotations;
  - b) could potentially submit a quotation in response to this request for quotations based on their qualifications, abilities or experience;
5. The Tenderer discloses that [check one of the following, as applicable]:
  - a) The Tenderer has arrived at the quotation independently from, and without consultation, communication, agreement or arrangement with, any competitor;
  - b) the Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for quotations, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements;
6. In particular, without limiting the generality of paragraphs (5)(a) or (5)(b) above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
  - a) prices;
  - b) methods, factors or formulas used to calculate prices;
  - c) the intention or decision to submit, or not to submit, a quotation; or
  - d) the submission of a quotation which does not meet the specifications of the request for quotations; except as specifically disclosed pursuant to paragraph (5) (b) above;
7. In addition, there has been no consultation, communication, agreement or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5)(b) above;
8. the terms of the quotation have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official quotation opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5)(b) above.

\_\_\_\_\_  
Date

\_\_\_\_\_  
*[Name, title and signature of authorized agent of Tenderer and Date]*

**3.6.5 Annex 12: SELF-DECLARATION FORM**

**[Mandatory To be completed by Tenderer]**

We, the Tenderer \_\_\_\_\_ (insert name) submitting our Quotation in respect of Quotation

No \_\_\_\_\_

\_\_\_\_\_ for \_\_\_\_\_ (insert

quotation Title Description) for \_\_\_\_\_ (insert Name of Procuring Entity)

**DECLARE AS FOLLOWS:**

That, We the Tenderer including any entity or individual that directly or indirectly controls, is controlled by or is under common control with us, and any subcontractors, suppliers, project managers, consultants, manufacturers, service providers, agents, individuals, or any other party involved or to be involved for any part of the processes of procurement and contract execution related to the above quotation:

- a) have not engaged/will not engage in any corrupt or fraudulent practices in the processes of procurement and contract execution related to the above quotation as defined and/or described in the following:
  - i) the RFQ for the above Quotation;
  - ii) Kenya's Public Procurement and Asset Disposal Act, 2015) and its attendant Regulations;
  - iii) Kenya's Anti-Corruption and Economic Crimes Act, 2013; and
  - iv) any such other Acts or Regulations of Government of Kenya;
- b) have not offered/will not offer any inducement to any member of the board, management, staff and/or employees and/or agents of KCEP-CRAL;
- c) have not engaged/will not engage in any collusive or corrosive practice with other tenderers participating in the subject quotation;
- d) have not been sanctioned or debarred by any entity from participation in public procurement proceedings of Kenya.

That, what is deponed to herein above is true to the best of our knowledge, information and belief.

**Name of the Tenderer:** .....  
*[Insert complete name of tenderer signing the quotation]*

**Name of the person duly authorized to sign the quotation on behalf of the Tenderer:**  
.....

*[Insert complete name of person duly authorized to sign the quotation]*

**Title of the person signing the Quotation:** .....  
*[Insert complete title of the person signing the quotation]*

**Signature of the person named above:**  
..... *[Insert signature of person whose name and capacity are shown above]*