

TENDER NO. KeNHA/R5/166/2021

PERFORMANCE BASED CONTRACT FOR THE MAINTENANCE OF STREET LIGHTING ON ATHI RIVER - BISIL (A2) ROAD (Reserved for All)

NOVEMBER 2021

DIRECTOR ROAD ASSET AND CORRIDOR MANAGEMENT KENYA NATIONAL HIGHWAYS AUTHORITY P.O. BOX 49712-00100 NAIROBI DIRECTOR GENERAL
KENYA NATIONAL HIGHWAYS
AUTHORITY
P.O. BOX 49712-00100
NAIROBI

TABLE OF CONTENTS

SECTION I - INVITATION FOR TENDERS	4
PART 1 – TENDERING PROCEDURES	8
SECTION II - INSTRUCTIONS TO TENDERERS	9
SECTION III - TENDER DATA SHEET	31
SECTION IV - EVALUATION AND QUALIFICATION CRITERIA	36
SECTION V - TENDERING FORMS	51
FORM ELI-1.1- TENDERER INFORMATION FORM	53
FORM ELI- 1.2- TENDERER JV INFORMATION	54
FORM ELI - 1.3- QUALIFICATION OF FOREIGN CONTRACTORS	55
FORM ELI - 1.4- DECLARATIONS OF MATERIALS, EQUIPMENT AND LABOUR SOURCES	57
FORM OF TENDER	58
FORM CON – 1 HISTORICAL CONTRACT NON-PERFORMANCE, PENDING LITIGATION AND LITIGATION HISTORY	71
FORM CON – 2: DECLARATION FORM – FAIR EMPLOYMENT LAW AND PRACTICES	72
FORM CON – 3: CERTIFICATE OF BIDDER'S VISIT TO SITE	73
FORM FIN – 3.1: FINANCIAL SITUATION AND PERFORMANCE	74
FORM FIN – 3.2: AVERAGE ANNUAL CONSTRUCTION TURNOVER	79
FORM FIN - 3.3: CURRENT CONTRACT COMMITMENTS / WORKS IN PROGRESS	80
FORM EXP - 4.1: GENERAL CONSTRUCTION EXPERIENCE	81
FORM EXP - 4.2(A): SPECIFIC CONSTRUCTION AND CONTRACT MANAGEMENT EXPERIENCE	82
FORM EXP - 4.2(B): CONSTRUCTION EXPERIENCE IN KEY ACTIVITIES	83
TECHNICAL PROPOSAL	85
FORM OF TENDER SECURITY - DEMAND GUARANTEE	94
PART 2 – WORKS REQUIREMENTS	95
SECTION VI - SPECIFICATIONS	96
SECTION VII – BILLS OF QUANTITIES	164
SECTION VIII - DRAWINGS	181
SECTION VIII - DRAWINGS	182
PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS	184
SECTION IX - CONDITIONS OF CONTRACT PART I -GENERAL CONDITIONS	185
SECTION X - CONDITIONS OF CONTRACT PART II -CONDITIONS OF PARTICULAR APPLICATION	187
SECTION XI - STANDARD CONTRACT FORMS	216
FORM NO. 1: NOTIFICATION OF INTENTION TO AWARD	218
FORM NO. 2: LETTER OF NOTIFICATION OF AWARD	221
FORM NO. 3: FORM OF AGREEMENT	222
FORM NO. 4 - PERFORMANCE SECURITY	224
FORM No. 5 - PERFORMANCE SECURITY OPTION 2— (Performance Bond)	226
FORM NO. 6 - ADVANCE PAYMENT SECURITY	228

SECTION I - INVITATION FOR TENDERS

SECTION 1: INVITATION TO TENDER

TENDER NO. KeNHA/R5/166/2021 – PERFORMANCE BASED CONTRACT FOR THE MAINTENANCE OF STREET LIGHTING ON ATHI RIVER – BISIL (A2) ROAD

The Kenya National Highways Authority (KeNHA) is a State Corporation established under the Kenya Roads Act, 2007, with the responsibility for the management, development, rehabilitation and maintenance of national roads.

The Authority invites bids from eligible construction companies registered with the National Construction Authority (NCA) in Category NCA 1 or 2 (Electrical) and registered with Energy & Petroleum Regulatory Authority (EPRA) in Class A for the PERFORMANCE BASED CONTRACT FOR THE MAINTENANCE OF STREET LIGHTING ON ATHI RIVER - BISIL (A2) ROAD to be funded through Road Maintenance Fuel Levy Fund (RMLF).

SCOPE OF WORK

The scope of works shall be as described in the tender document.

QUALIFICATION FOR TENDERING

Mandatory Requirements

The following **MUST** be submitted together with the bid;

- 1. Copy of Certificate of incorporation
- 2. Copy of <u>Valid</u> Annual Practicing License with the National Construction Authority in the classes specified above
- 3. Copy of <u>Valid</u> Annual Practicing License with the Energy and Petroleum Regulatory Authority in the classes specified above
- 4. Copy of **Valid** Tax Compliance Certificate
- 5. Copy of recent CR 12 form (Issued within the last Six 6 months from the Tender Opening Date).
- 6. Bidders shall **sequentially serialize** all pages of each tender submitted
- 7. A copy of PBC Certificate for at least one of the Directors.

Other Requirements

As specified in the respective tender documents covering the following: -

- 1. Similar previous experience where applicable.
- 2. Professional and Technical Personnel.
- 3. Current work load.
- 4. Eligibility
 - a. To enhance equity, bidders shall bid for a maximum of **Two** (2) Tenders, but can only be Awarded a Maximum of **One** (1) Tenders, under this Tender Notice. Bidders who participate in more than **Two** (2) tenders shall be disqualified.
 - b. Director (s) bidding under different companies for the same tender shall be disqualified
 - c. Director (s) bidding under different companies should not participate in more than **Two (2)** tenders

- d. Only those bidders registered in the Category as indicated in the tender document shall bid for the respective tenders
- e. Bidders to comply with section 157 (8) (a) (i) and (ii) of the PPDA on exclusive preference for citizen contractors
- f. Any form of Canvassing will lead to disqualification

Note:

- 1. All submitted Documents may be verified from the issuing agencies, KeNHA Reserves the right to verify all submitted documents
- 2. The Bidders to ensure that their rates in the bills of quantities are within the prevailing market rates for road works

Procurement shall be based on the post qualification method and the above details will be submitted with the priced bid.

There shall be a **mandatory** Pre-Tender Site Visit as specified in the detailed Tender Notice and as uploaded onto the KeNHA Website.

NOTE:

Every Bidder shall be represented by one Technical Person with a Minimum qualification of a Diploma in Electrical Engineering. The Individual MUST Bring along the following:

- 1. Original ID/Passport and a Copy
- 2. Original Diploma/H. Dip. /Degree Certificate and a Copy
- 3. Original and Copy of Registration Certificate/ or proof of current subscription by EBK/KETRB
- 4. Original Introductory letter bearing the Company letterhead and an Official Stamp authorizing them to represent the company in the SPECIFIC pre-tender site visit/Pre Tender Conference. The letter shall be duly signed by the Director of the company. Photocopies or any other media shall not be accepted.

The copies of ID, Academic Certificate, Professional Registration certificate and introductory letters shall be retained by the Procuring Entity's Team and may be verified later for authenticity.

One (1) person shall only represent one (1) company per Tender.

The detailed tender notice is available in the KeNHA website and Public Procurement Information Portal (PPIP). Clarifications and Questions may be sent to procurement@kenha.co.ke as indicated in the Tender Notice

NOTE:

Every bidder shall make their own arrangements to familiarize themselves with the site conditions and the Road and its features.

Interested eligible candidates may obtain further information and inspect tender documents from the **Procurement Office, Kenya National Highways Authority, Nairobi Regional Office, Machakos Road** as indicated in the Tender Notice during normal working hours.

A complete set of tender documents may be obtained by interested tenderers from the Kenya National Highways Authority website: www.kenha.co.ke or PPIP portal: www.tenders.go.ke free of charge. Bidders are encouraged to download tender documents to minimise physical visits to the respective **KeNHA Regional Offices.**

Completed tender documents are to be enclosed in plain sealed envelope clearly marked with tender name, reference number and submitted to: -

Office of the Regional Director - Nairobi Region,

Kenya National Highways Authority,

Machakos Road Industrial Area

P. O. Box 200-00507,

Nairobi-Kenya

Or

Deposited in the Tender Box at the reception area, **KeNHA Nairobi Regional office**So as to be received on or before **the Date and Time as indicated in the Tender Notice.**

All interested bidders are required to continually check the Kenya National Highways Authority website: www.kenha.co.ke for any tender addendums or clarifications that may arise before submission date.

Tenders will be opened immediately thereafter in the presence of Tenderers/Representatives who wish to attend at the KeNHA Nairobi Regional Office Board Room.

Deputy Director, Supply Chain Management

For: DIRECTOR GENERAL

PART 1 – TENDERING PROCEDURES

SECTION II - INSTRUCTIONS TO TENDERERS

SECTION 2 - INSTRUCTIONS TO TENDERERS

A. GENERAL

1. Scope of Tender

- 1.1 The Procuring Entity, as indicated in the TDS, issues this tendering document for the procurement of Works and Services as listed below for the award of a Performance-based Road Contract. The name, identification, and number of lots (contracts) of this ITT are specified in the TDS. The Works and Services under the Performance-based Contract will cover the Roads indicated in the TDS and will consist of:
- a) Maintenance Services or "Services" consisting of all interventions on the Roads which are to be carried out by the contractor in order to achieve and keep the Road performance stand defined by the Service Level included in Section VII, Specifications for Works and Services of this tendering document, and all activities related to the management and evaluation of the road network under contract;
- b) Rehabilitation Works, when requested in the TDS for the sections of the Road(s) indicated in the TDS, consisting of specific types of civil works described in the Specifications;
- c) Improvement Works, when requested in the TDS, consisting of a set of specific interventions indicated in the Specifications to add new characteristics to the Roads in response to existing or new traffic and safety or other considerations;
- d) Works consisting of activities needed to reinstate the Roads and reconstruct their structure or their right of way which has been damaged as a result of natural phenomena with imponderable consequences, such as strong storms, flooding, and earthquakes.

2. Interpretations

Throughout this tendering document:

The term "in writing" means communicated in written form (e.g. by mail, e-mail, and fax, including if specified in the TDS, distributed or received through electronic-procurement system used by the Procuring Entity) with proof of receipt;

if the context so requires, "singular" means "plural and vice versa; and "Day" means calendar day, unless otherwise specified as a "Business Day." A Business Day is any day that is a working day of the Procuring Entity. It excludes the Procuring Entity's official public holidays.

3. Fraud and Corruption

- 3.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.
- 3.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.

- 3.3 Unfair Competitive Advantage-Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the Data Sheet and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.
- 3.4 Tenderers shall permit and shall cause their agents (where declared or not), subcontractors, sub consultants, service providers, suppliers, and their personnel, to permit the Procuring Entity to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Procuring Entity.

4. Eligible Tenderers

- 4.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 4.6 or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a Form of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Tendering process and, in the event the JV is awarded the Contract, during contract execution. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender. The maximum number of JV members shall be specified in the TDS.
- 4.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers with such relatives are also not allowed to participate in any procurement proceedings.
- 4.3 A Tenderer shall not have a conflict of interest. Any Tenderer found to have a conflict of interest shall be disqualified. A Tenderer may be considered to have a conflict of interest for the purpose of this Tendering process, if the Tenderer:
- a) Directly or indirectly controls, is controlled by or is under common control with another Tenderer; or
- b) Receives or has received any direct or indirect subsidy from another Tenderer; or
- c) Has the same legal representative as another Tenderer; or
- d) Has a relationship with another Tenderer, directly or through common third parties, that puts it in a position to influence the Tender of another Tenderer, or influence the decisions of the Procuring Entity regarding this Tendering process; or
- e) Or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Tender; or
- f) Or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity or Procuring Entity as Engineer for the Contract implementation; or
- g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the TDS ITT 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
- h) 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 tendering document or specifications of the Contract, and/or the Tender evaluation process of such Contract; or
- ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the Tendering process and execution of the Contract.
- 4.4 A firm that is a Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative Tenders. This includes participation as a subcontractor in other Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. A firm that is not a Tenderer or a JV member may participate as a subcontractor in more than one Tender.
- 4.5 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT 4.9. A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case maybe. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub-consultants for any part of the Contract including related Services.
- 4.6 Tenderer that has been debarred from participating in public procurement shall be ineligible to be prequalified for a tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.keoremailcomplaints@ppra.go.ke.
 - 4.7 Tenderers that are state-owned enterprises or institutions in Kenya may be eligible to compete and be awarded a Contract(s) only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Procuring Entity.
 - 4.8 Tenderer shall not be under suspension from Tendering by the Procuring Entity as the result of the operation of a Tender-Securing or Proposal-Securing Declaration.
 - 4.9 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, if Kenya prohibits commercial relations with that country, or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
 - 4.10 Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, subcontracts and labor) from national suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity determine if this condition is met shall be provided in for this purpose is be provided in "SECTION IV EVALUATION AND QUALIFICATION CRITERIA, Item 9".
 - 4.11 Pursuant to the eligibility requirements of ITT 4.10, a tender is considered a foreign tenderer, if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has less than 51 percent ownership by Kenyan citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not

subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.

- 4.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration for foreign contractors shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.
- 4.13 The Energy and Petroleum Regulatory Authority is responsible for economic and technical regulation of the electric power sub-sector and for this purpose, it has powers to register electrical contractors. A tenderer shall provide evidence of having registered as an electrical contractor by producing a current EPRA Practicing License. Application for registration with Energy and Petroleum Regulatory Authority may be accessed from the website www.epra.go.ke.
- 4.14 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the websitewww.cak.go.ke
- 4.15 A Tenderer may be considered ineligible if he/she offers goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.
- 4.16 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax compliance or tax exemption certificate issued by the Kenya Revenue Authority.

5. Eligible Materials, Equipment, and Services

- 5.1 The materials, equipment and services to be supplied under the Contract may have their origin in any eligible country and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of materials, equipment and services.
- 5.2 For purposes of ITT 5.1 above, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially different in its basic characteristics or in purpose or utility from its components.

B. Contents of Tendering Document

6 Sections of Tendering Document

6.1 The tendering document consists of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITT 10.

PART 1 - Tendering Procedures

Section I- Invitation for Tenders

Section II- Instructions to Tenderers (ITT) Section II-Tender Data Sheet (TDS)

Section III- Tender Data Sheet

Section IV- Evaluation and Qualification Criteria

Section V-Tendering Forms

PART 2 - Works and Services' Requirements

Section VI - Specifications

Section VII – Bills of Quantities

Section VIII – Drawings

PART 3-Conditions of Contract and Contract Forms

Section IX – Conditions of Contract Part I - General Conditions of Contract

Section X - Conditions of Contract Part II - Conditions of Particular Application

Section XI – Standard Contract Forms

- 6.2 The Invitation to Tender (ITT) or the notice to the prequalified Tenderers issued by the Procuring Entity is not part of the tendering document.
- 6.3 Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the tendering document, responses to requests for clarification, the minutes of the pre-Tender meeting (if any), or Addenda to the tendering document in accordance with ITT 10. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.
- 6.4 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tendering document and to furnish with its Tender all information and documentation as is required by the tendering document.

7 Site Visit

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

8 Pre-Tender Meeting and a pre-arranged pretender site visit

8.1 The Procuring Entity shall specify in the TDS if a pre-tender conference will be held, when and where. The Procuring Entity shall also specify in the TDS if a pre-arranged pretender visit of the site of the works will be held and when. The Tenderer's designated representative is invited

- to attend a pre-arranged pretender visit of the site of the works. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 8.2 The Tenderer is requested to submit any questions in writing, to reach the Procuring Entity not later than the period specified in the TDS before the meeting.
- 8.3 Minutes of the pre-Tender meeting and the pre-arranged pretender visit of the site of the works, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired the Tender Documents in accordance with ITT 6.3. Minutes shall not identify the source of the questions asked.
- 8.4 The Procuring Entity shall also promptly publish anonymized (no names) Minutes of the pre-Tender meeting and the pre-arranged pretender visit of the site of the works at the web page identified in the TDS. Any modification to the Tender Documents that may become necessary as a result of the pre-Tender meeting shall be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to ITT 10 and not through the minutes of the pre-Tender meeting. Nonattendance at the pre-Tender meeting will not be a cause for disqualification of a Tenderer.

9 Clarification of Tender Documents

9.1 A Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the Procuring Entity's address specified in the TDS or raise its enquiries during the pre-Tender meeting and the pre-arranged pretender visit of the site of the works if provided for in accordance with ITT 8.4. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received no later than the period specified in the TDS prior to the deadline for submission of tenders. The Procuring Entity shall forward copies of its response to all tenderers who have acquired the Tender Documents in accordance with ITT 6.3, including a description of the inquiry but without identifying its source. If so specified in the TDS, the Procuring Entity shall also promptly publish its response at the web page identified in the TDS. Should the clarification result in changes to the essential elements of the Tender Documents, the Procuring Entity shall amend the Tender Documents appropriately following the procedure under ITT 10.

10 Amendment of Tendering Document

- 10.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tendering document by issuing addenda.
- 10.2 Any addendum issued shall be part of the tendering document and shall be communicated in writing to all who have obtained the tendering document from the Procuring Entity in accordance with ITT 6.3. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's website in accordance with ITT 8.4.
- 10.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity shall extend, as necessary, the deadline for submission of Tenders, in accordance with ITT 24.2 below.

C. Preparation of Tenders

11 Cost of Tendering

11.1 The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.

12 Language of Tender

12.1 The Tender, as well as all correspondence and documents relating to the Tender exchanged by

the Tenderer and the Procuring Entity, shall be written in the English language. Supporting documents and printed literature that are part of the Tender may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language, in which case, for purposes of interpretation of the Tender, such translation shall govern.

13 Documents Comprising the Tender

- 13.1 The Tender shall comprise the following:
 - a Form of Tender prepared in accordance with ITT 14;
 - b Schedules, including priced Bills of Quantities completed in accordance with ITT 14 and ITT 16;
 - c Tender Security or Tender-Securing Declaration, in accordance with ITT 21.1;
 - d Alternative Tender, if permissible, in accordance with ITT 15;
 - e Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 22.3;
 - f Qualifications: documentary evidence in accordance with ITT 19 establishing the Tenderer's qualifications, or continued qualified status, as the case may be, to perform the Contract if its Tender is accepted;
 - g Conformity: a technical proposal in accordance with ITT 18;
 - h Any other document required in the TDS.
- 13.2 In addition to the requirements under ITT 13.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a Form of Intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender, together with a copy of the proposed agreement.
- 13.3 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.

14 Form of Tender, and Schedules

14.1 The Form of Tender and Schedules, including the Bills of Quantities, shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested. The Tenderer chronologically serialize all pages of the tender documents submitted.

15 Alternative Tenders

- 15.1 Unless otherwise indicated in the TDS, alternative Tenders shall not be considered.
- 15.2 When alternative times for reaching the required Service Levels or for the completion of Rehabilitation or Improvement Works are explicitly invited, a statement to that effect will be included in the TDS, as will the method of evaluating different times for completion.
- 15.3 Except as provided under ITT 15.4 below, Tenderers wishing to offer technical alternatives to the requirements of the tendering document must first price the Procuring Entity's design as described in the tendering document and shall further provide all information necessary for a complete evaluation of the alternative by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.
- 15.4 When specified in the TDS, Tenderers are permitted to submit alternative technical solutions for specified parts of the Rehabilitation and/or Improvement Works, and such parts will be

identified in the TDS, as will the method for their evaluating, and described in Section VII, Works and Services' Requirements.

16 Tender Prices and Discounts

- 16.1 The prices and discounts quoted by the Tenderer in the Form of Tender and in the Bills of Quantities shall conform to the requirements specified below.
- 16.2 The Tenderer shall fill in rates and prices for all items of the Works and Services described in the Bills of Quantities. Items against which no rate or price is entered by the Tenderer will not be paid for by the Procuring Entity when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities and will not be paid for separately by the Procuring Entity. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.
- 16.3 The price to be quoted in the Form of Tender, in accordance with ITT 14.1, shall be the total price of the Tender, excluding any discounts offered.
- 16.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 16.1.
- 16.5 Unless otherwise provided in the TDS and the Contract, the rates and prices quoted by the Tenderer are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.
- 16.6 If so indicated in ITT 1.1, Tenders are being invited for individual lots (contracts) or for any combination of lots (packages). Tenderers wishing to offer any price reduction for the award of more than one Contract shall specify in their tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 14.4, provided the Tenders for all lots (contracts) are submitted and opened at the same time.
- 16.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

17 Currencies of Tender and Payment

- 17.1 The currency (ies) of the Tender and the currency (ies) of payments shall be the same and shall be as specified in the TDS.
- 17.2 Tenderers may be required by the Procuring Entity to justify, to the Procuring Entity's satisfaction, their foreign currency requirements, and to substantiate that the amounts shown in the Summary of Payment Currency Schedule, in which case a detailed breakdown of the foreign currency requirements shall be provided by Tenderers.

18 Documents Comprising the Technical Proposal

18.1 The Tenderer shall furnish a technical proposal (if so required) including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Tendering Forms, in sufficient detail to demonstrate the adequacy of the Tenderers' proposal to meet the work and services' requirements and the completion time.

19 Documents Establishing the Qualifications of the Tenderer

- 19.1 To establish Tenderer's eligibility in accordance with ITT 4, Tenderers shall complete the Form of Tender, included in Section V, Tendering Forms.
- 19.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section V, Tendering Forms.
- 19.3 If a margin of preference applies as specified in accordance with ITT 36.1, domestic Tenderers, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 36.1.
- 19.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.
- 19.5 The purpose of the information described in ITT 19.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.
- 19.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 19.4. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.
- 19.7 All information provided by the tendered pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.
- 19.8 If a tenderer fails to submit the information required by these requirements, its tenderer will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tendered pursuant to these requirements, then the tender will be rejected.
- 19.9 If information submitted by a tendered pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:
 - i) If the procurement process is still ongoing, the tenderer will be disqualified from the procurement process,
 - ii) If the contract has been awarded to that tenderer, the contract award will be set aside,
 - iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.
- 19.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 19.9 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

20 Period of Validity of Tenders

- 20.1 Tenders shall remain valid for the period specified in the TDS. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 24). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
- 20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 21, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender Security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 26.3.

21 Tender Security

- 21.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the TDS, in original form and, in the case of a Tender security, in the amount and currency specified in the TDS.
- 21.1 A Tender-Securing Declaration shall use the form included in Section IV, Tendering Forms.
- 21.2 The Tender Security shall be a demand guarantee at the Tenderer's option, in any of the following forms:
 - i. a bank guarantee;
 - ii. a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority; or
 - iii. a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya, from a reputable source, and an eligible country.
 - iv. Other forms of Security as specified in the TDS.
- 21.3 If the unconditional guarantee is issued by a non-bank financial institution located outside Kenya, the issuing non-bank financial institution shall have a correspondent financial institution located in Kenya to make it enforceable unless the Procuring Entity has agreed in writing, prior to Tender submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Tender Security shall be submitted either using the Tender Security Form included in Section IV, Tendering Forms, or in another substantially similar format approved by the Procuring Entity prior to Tender submission. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 24.2.
- 21.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 21.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.
- 21.5 If a Tender Security is specified pursuant to ITT 21.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined non responsive or a bidder declines to extend tender validity period.
- 21.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security.

- 21.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:
 - a if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereto provided by the Tenderer; or
 - b if the successful Tenderer fails to:
 - i. sign the Contract in accordance with ITT 48; or
 - ii. furnish a performance security.
- 21.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.
- 21.9 The Tender Security or the Tender Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted at the time of Tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the Form of intent referred to in ITT 4.1 and ITT 13.2.

22 Format and Signing of Tender

- 22.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 13and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 15, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number specified in the TDS and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 22.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 22.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the TDS and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.
- 22.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 22.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Tender.

D. Submission and Opening of Tenders

23 Sealing and Marking of Tenders

- 23.1 Depending on the sizes or quantities or weight of the tender documents, a tenderer may use an envelope, package or container. The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:
 - a. in an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as described in ITT 13; and
 - b. in an envelope or package or container marked "COPIES", all required copies of the Tender; and

- c. if alternative Tenders are permitted in accordance with ITT 15, and if relevant:
 - i. in an envelope or package or container marked "ORIGINAL ALTERNATIVE TENDER", the alternative Tender; and
 - ii. in the envelope or package or container marked "COPIES-ALTERNATIVE TENDER", all required copies of the alternative Tender.
- 23.2 The inner envelopes or packages or containers shall:
 - a Bear the name and address of the Procuring Entity.
 - b Bear the name and address of the Tenderer; and
 - c Bear the name and Reference number of the Tender.
- 23.3 Where a tender package or container cannot fit in the tender box, the procuring entity shall:
 - a Specify in the TDS where such documents should be received.
 - b Maintain a record of tenders received and issue acknowledgement receipt note to each tenderer specifying time and date of receipt.
 - c Ensure all tenders received are handed over to the tender opening committee for opening at the specified opening place and time.
- 23.4 If all envelopes are not sealed and marked as required, the Procuring Entity will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

24 Deadline for Submission of Tenders

- 24.1 Tenders must be received by the Procuring Entity at the address and no later than the date and time indicated in the TDS. When so specified in the TDS, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the TDS.
- 24.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the tendering document in accordance with ITT 10, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

25 Late Tenders

25.1 The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of Tenders, in accordance with ITT 22. Any Tender received by the Procuring Entity after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

26 Withdrawal, Substitution, and Modification of Tenders

- 26.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:
 - a prepared and submitted in accordance with ITT 20 and ITT 21 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION; "and
 - b received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 22.
- 26.2 Tenders requested to be withdrawn in accordance with ITT 24.1 shall be returned unopened to the

Tenderers.

26.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender Form or any extension thereof.

27 Tender Opening

- 27.1 Except in the cases specified in ITT 23 and ITT 24.2, the Procuring Entity shall publicly open and read out in accordance with this ITT all Tenders received by the deadline, at the date, time and place specified in the TDS, in the presence of Tenderers' designated representatives and anyone who chooses to attend. Any specific electronic Tender opening procedures required if electronic tendering is permitted in accordance with ITT 22.1, shall be as specified in the TDS.
- 27.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Tender shall not be opened, but returned to the Tenderer. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.
- 27.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.
- 27.4 Next, Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.
- 27.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security, if required; and any other details as the Procuring Entity may consider appropriate.
- 27.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further. The Form of Tender and the Bill of Quantities are to be initialed by representatives of the Procuring Entity attending Tender opening in the manner specified in the TDS.
- 27.7 The Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 23.1).
- 27.8 The Procuring Entity shall prepare a record of the Tender opening that shall include, as a minimum:
 - i. The name of the Tenderer and whether there is a withdrawal, substitution, or modification;
 - ii. The Tender Price, per lot (contract) if applicable, including any discounts;
 - iii. Any alternative Tenders;
 - iv. The presence or absence of a Tender Security, if one was required.
 - v. Number of pages of each tender document submitted
- 27.9 The Tenderers' representatives who are present shall be requested to sign the record. The omission of a Tenderer's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Tenderers. A copy of the tender opening register shall be issued to a Tenderer upon request

E. Evaluation and Comparison of Tenders

28 Confidentiality

- 28.1Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with such process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 43.
- 28.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its Tender.
- 28.3 Notwithstanding ITT 28.2, from the time of Tender opening to the time of Contract award, if any Tenderer wishes to contact the Procuring Entity on any matter related to the Tendering process, it may do so in writing.

29 Clarification of Tenders

- 29.1 To assist in the examination, evaluation, and comparison of the Tenders, and qualification of the Tenderers, the Procuring Entity may, at its discretion, ask any Tenderer for a clarification of its Tender. Any clarification submitted by a Tenderer that is not in response to a request by the Procuring Entity shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change in the prices or substance of the Tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation of the Tenders, in accordance with ITT 33.
- 29.2 If a Tenderer does not provide clarifications of its Tender by the date and time set in the Contracting Agency's request for clarification, its Tender may be rejected.

30 Deviations, Reservations, and Omissions

- 30.1 During the evaluation of Tenders, the following definitions apply:
 - "Deviation" is a departure from the requirements specified in the tendering document; "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tendering document; and
 - b "Omission" is the failure to submit part or all of the information or documentation required in the tendering document.

31 Determination of Responsiveness

- 31.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the Tender itself, as defined in ITT 13.
- 31.2 A substantially responsive Tender is one that meets the requirements of the tendering document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
 - a. If accepted, would:
 - i. Affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
 - ii. Limit in any substantial way, in consistent with the tendering document, the Procuring Entity's rights or the Tenderer's obligations under the proposed Contract; or
 - b. if rectified, would unfairly affect the competitive position of other Tenderers presenting substantially responsive Tenders.
- 31.3 The Procuring Entity shall examine the technical aspects of the Tender submitted in accordance with ITT18, Technical Proposal, in particular, to confirm that all requirements of Section VII, Specifications for Works and Services have been met without any material deviation,

reservation or omission.

31.4 If a Tender is not substantially responsive to the requirements of the tendering document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

32 Non-material Non-conformities

- 32.1 Provided that a Tender is substantially responsive, the Procuring Entity may waive any non-conformities in the Tender.
- 32.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the Tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial non- conformities in the Tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the Tender. Failure of the Tenderer to comply with the request may result in the rejection of its Tender.
- 32.3 Provided that a Tender is substantially responsive, the Procuring Entity shall rectify nonmaterial non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the TDS.

33 Correction of Arithmetical Errors

- 33.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in anyway by any person or entity.
- 33.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle errors on the following basis:
 - a Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.
 - b Any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and
 - c If there is a discrepancy between words and figures, the amount in words shall prevail
- 33.3 Tenderers shall be notified of any error detected in their bid during the notification of award.

34 Conversion to Single Currency

34.1 For evaluation and comparison purposes, the currency(ies) of the Tender shall be converted into a single currency which is Kenya Shillings. The source of the exchange rates shall be the Central Bank of Kenya.

35 Nominated Subcontractors

- 35.1 Unless otherwise stated in the TDS, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected/nominated by the Procuring Entity. In case the Procuring Entity nominates a subcontractor, the subcontract agreement shall be signed by the Subcontractor and the Procuring Entity. The main contract shall specify the working arrangements between the main contractor and the nominated subcontractor.
- 35.2 Tenderers may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the TDS. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.

35.1 The subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated so by the Procuring Entity in the TDS as can be met by subcontractors referred to here after as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Tenderer may be added to the qualifications of the Tenderer.

36 Margin of Preference and Reservations

- 36.1 A margin of preference on local contractors may be allowed only when the contract is open to international competitive tendering where foreign contractors are expected to participate in the tendering process and where the contract exceeds the value/threshold specified in the Regulations.
- 36.2 A margin of preference shall not be allowed unless it is specified so in the TDS.
- 36.3 Contracts procured on basis of international competitive tendering shall not be subject to reservations exclusive to specific groups as provided in ITT 36.5.
- 36.4 An individual firm is considered a Kenyan tenderer for purposes of the margin of preference if it is registered in Kenya, has more than 51 percent ownership by nationals of Kenya, and if it does not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign contractors. JVs are considered as Kenyan Tenderer and eligible for domestic preference only if the individual member firms are registered in Kenya or have more than 51 percent ownership by nationals of Kenya, and the JV shall be registered in Kenya. The JV shall not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign firms.
- 36.5 Where it is intended to reserve a contract to a specific group of businesses (these groups are Small and Medium Enterprises, Women Enterprises, Youth Enterprises and Enterprises of persons living with disability, as the case may be), and who are appropriately registered as such by a competent authority, a procuring entity shall ensure that the invitation to tender specifically indicates that only businesses or firms belonging to the specified group are eligible to tender. No tender shall be reserved to more than one group. If not so stated in the Invitation to Tender and in the Tender documents, the invitation to tender will be open to all interested tenderers.

37 Evaluation of Tenders

- 37.1 The Procuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Procuring Entity shall determine the Best Evaluated Tender in accordance with ITT 39.
- 37.2 To evaluate a Tender, the Procuring Entity shall consider the following:
 - a Price adjustment due to discounts offered in accordance with ITT 16.4;
 - b Price adjustment due to quantifiable non-material non-conformities in accordance with ITT 32.3;
 - c converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 34; and
 - d any additional evaluation factors specified in the TDS and Section III, Evaluation and Oualification Criteria.
- 37.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in tender evaluation.
- 37.4 In the case of multiple contracts or lots, Tenderers are allowed to tender for one or more lots and the methodology to determine the lowest evaluated cost of the lot (contract) and for combinations, including any discounts offered in the Form of Tender, is specified in Section III, Evaluation and Qualification Criteria.

37.5 The price of the Rehabilitation and Improvement Works included in each Tender shall not be higher than the threshold indicated in the TDS. If the Tenderer estimates that its costs for the Rehabilitation and Improvement Works are higher than the threshold indicated in the TDS, it shall include the portion above the threshold in its price for the Maintenance Services. If the Tender price in the Best Evaluated Tender is above the threshold indicated in the TDS for the Rehabilitation and Improvement Works, the Procuring Entity may reject the Tender.

38 Comparison of Tenders

- 38.1 The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders in accordance with ITT 34.2 to determine the Tender that has the lowest evaluated cost.
- 38.2 After application of the criteria established in ITT 37.1 to ITT 37.5, the Evaluated Tender Price for comparison of Tenders will be:
 - a The lump-sum price offered by the Tenderer for the Maintenance Services; plus
 - b The lump-sum price offered by the Tenderer for the Rehabilitation Works, if the tendering document requires prices for this type of works; plus
 - c the total price of the priced Bill of Quantities for the Improvement Works, if the tendering document requires prices for this type of works; plus
 - d the total price of the priced Bill of Quantities for the Emergency Works.

39 Abnormally Low Tenders

- 39.1 An Abnormally Low Tender is one where the Tender price, in combination with other constituent elements of the Tender, appears unreasonably low to the extent that the Tender price raises material concerns as to the capability of the Tenderer to perform the Contract for the offered Tender price.
- 39.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the tendering document.
- 39.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

40 Abnormally High Tenders

- 40.1 An abnormally high price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that the Procuring Entity is concerned that it (the Procuring Entity) may not be getting value for money or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.
 - 40.2 In case of an abnormally high tender price, the Procuring Entity shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. The Procuring Entity may also seek written clarification from the tenderer on the reason for the high tender price. The Procuring Entity shall proceed as follows:
 - i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.
 - ii) If specifications, scope of work and/or conditions of contract are contributory to the

abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.

40.3 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (often due to collusion, corruption or other manipulations), the Procuring Entity shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

41 Unbalanced Tenders or Front Loaded

- 41.1 If the Tender that is evaluated as the lowest evaluated cost is, in the Procuring Entity's opinion, seriously unbalanced or front loaded the Procuring Entity may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the Tender prices with the scope of works, proposed methodology, schedule and any other requirements of the tendering document.
 - 41.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:
 - a) Accept the Tender; or
 - b) Require that the amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding 20% of the Contract price; or
 - c) Reject the Tender.

42 Qualification of the Tenderer

- 42.1 The Procuring Entity shall determine to its satisfaction whether the Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria or, if prequalification has taken place, continues to be eligible and continues to meet the qualifying criteria.
- 42.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 19.2. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors, if permitted in TDS when prequalification has not taken place) or any other firm(s) different from the Tenderer.
- 42.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the next lowest evaluated Tender to make a similar determination of that Tenderer's qualifications to perform satisfactorily.

43 Lowest Evaluated Tender

- 43.1 Having compared the evaluated costs of Tenders, the Procuring Entity shall determine the Best Evaluated Tender. The Best Evaluated Tender is the Tender of the Tenderer that meets the Oualification Criteria and whose Tender has been determined to be:
- a) Most responsive to the tendering document; and
- b) The lowest evaluated cost.

44 Procuring Entity's Right to Accept Any Tender, and to Reject Any or All Tenders

44.1 The Procuring Entity reserves the right to accept or reject any Tender, and to annul the Tendering process and reject all Tenders at any time prior to contract award, without thereby

incurring any liability to Tenderers. In case of annulment, all Tenderers shall be notified with reasons and all Tenders submitted and specifically, Tender securities, shall be promptly returned to the Tenderers.

45 Notice of Intention to enter in to a Contract

- 45.1 Upon award of the contract and Prior to the expiry of the Tender Validity Period the Procuring Entity shall issue a Notification of Intention to Enter into a Contract/Notification of award to all tenderers which shall contain, at a minimum, the following information:
 - a) The name and address of the Tenderer submitting the successful tender;
 - b) The Contract price of the successful tender;
 - c) A statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in © above already reveals the reason;
 - d) The expiry date of the Standstill Period; and
- e) Instructions on how to request a debriefing and/or submit a complaint during the standstill period;

46 Standstill Period

- 46.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply. Where only one Tender is submitted, the Standstill Period shall not apply.
- 46.2 Where a Standstill Period applies, it shall commence 100when the Procuring Entity has transmitted to each Tenderer the Notification of Intention to Enter into a Contract with the successful Tenderer.

47 Debriefing by the Procuring Entity

- 47.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 43, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.
- 47.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

F. Contract Negotiations and Award of Contract

48 Negotiations

- 48.1 Before signature of contract, the procuring Entity may conduct negotiations with the best evaluated tenderer. The negotiations will be held at the date and address indicated in the TDS with the Tender's Representatives who must have written power of attorney to negotiate a Contract on behalf of the Tenderer.
- 48.2 The Procuring Entity shall prepare minutes of negotiations that are signed by the Procuring Entity and the Tender's authorized representative.
- 48.3 The negotiations include discussions of the Schedule of Requirements, the proposed methodology, the Procuring Entity's inputs, the Special Conditions of the Contract, and finalizing the "Works and Services' Requirements" part of the Contract. These discussions shall not substantially alter the original scope of services or the terms of the contract, lest the quality of the final product, its price, or the relevance of the initial evaluation be affected.

- 48.4 The financial negotiations include the clarification of the tax liability in Kenya and how it should be reflected in the Contract. If the selection method included cost as a factor in the evaluation, the total price stated in the Financial Proposal for a Lump-Sum contract shall not be negotiated. The Procuring Entity may ask for clarifications and, if the costs are very high, ask to change the rates.
- 48.5 The negotiations are concluded with a review of the finalized draft Contract, which then shall be initialed by the Procuring Entity and the Tender's authorized representative. If the negotiations fail, the Procuring Entity shall inform the Tender in writing of all pending issues and disagreements and provide a final opportunity to the Tenderer to respond. If disagreement persists, the Procuring Entity shall terminate the negotiations informing the Tenderer of the reasons for doing so. The Procuring Entity will invite the next-ranked Tenderer to negotiate a Contract. Once the Procuring Entity commences negotiations with the next-ranked Tenderer, the Procuring Entity shall not reopen the earlier negotiations.

49 Letter of Award

49.1 Prior to the expiry of the Tender Validity Period and upon expiry of the Standstill Period specified in ITT 44.1, upon addressing a complaint that has been filed within the Standstill Period, the Procuring Entity shall transmit the Letter of Award to the successful Tenderer. The letter of award shall request the successful tenderer to furnish the Performance Security within 21 days of the date of the letter.

50 Signing of Contract

- 50.1 Upon the expiry of the fourteen days of the Notification of Intention to enter into contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.
- 50.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.
- 50.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period

51 Performance Security

- 51.1 Within twenty-one (21) days of the receipt of the Letter of Award from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and if required in the TDS, using for that purpose the Performance Security Forms included in Section VIII, Contract Forms, or another form acceptable to the Procuring Entity. If the Performance Security furnished by the successful Tenderer is in the form of a bond, it shall be issued by a bonding or insurance company that has been verified by the successful Tenderer to be acceptable to the Procuring Entity. A foreign institution providing a bond shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent financial institution is not required.
- 51.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.

52 Publication of Procurement Contract

- 52.1 Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:
 - a) Name and address of the Procuring Entity;
 - b) Name and reference number of the contract being awarded, a summary of its scope and the selection method used;

- c) The name of the successful Tenderer, the final total contract price, the contract duration.
- d) dates of signature, commencement and completion of contract; names of all Tenderers that submitted Tenders, and their Tender prices as read out at Tender opening.

53 Procurement Related Complaints

53.1 The procedures for making a Procurement-related Complaint are as specified in the TDS.

SECTION III - TENDER DATA SHEET

SECTION III - TENDER DATA SHEET

The following specific data for the Works and Services to be procured shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT). Whenever there is a conflict, the provisions herein shall prevail over those in ITT.

A. General					
	The reference number of the Invitation to Tender is: KeNHA/R5/166/2021				
	The Procuring Entity is: <u>Kenya National Highways Authority (KeNHA)</u>				
	The name of the ITT is: Not Applicable				
	The number and identification of lots (contracts) comprising this ITT T is: Not Applicable				
	The Roads are Athi River-Bisil Street Lighting				
	Rehabilitation Works are required				
	The sections of the Road(s) subject to Rehabilitation Works are: <u>Athi River Interchange</u> <u>– Bisil</u>				
	Improvement Works are required.				
ITT 4.1	Maximum number of members in the JV shall be: Two (2)				
ITT 4.10	Citizen contractors are encouraged to source locally manufactured items/materials and locally assembled machines, equipment, vehicles, labour etc.				
ITT 4.11	The Tenderer will require to register with whose contact addressed are:				
	Not Applicable				
B. Contents of	Tender Document				
ITT 7.1	There shall be a mandatory pre-tender site visit as specified in the detailed tender notice				
ITT 8.2	The Tenderer will submit any questions in writing, to reach the Procuring Entity				
	not later than 7 days to the submission date				
ITT 8.4	The Procuring Entity's website where Minutes of the pre-Tender meeting and the pre- arranged pretender will be published is www.kenha.co.ke				
ITT9.1	For Clarification of Tender purposes, for obtaining further information and for purchasing tender documents, the Procuring Entity's address is:				
	As indicated in the tender notice				
C. Preparation	of Tenders				
ITT 13.1 (h)	The Tenderer shall submit the following additional documents in its Tender: As indicated in the Qualification Criteria				

ITT 15	[The following provision should be included and the required corresponding information inserted <u>only</u> if alternative Tenders will be considered. Otherwise omit.}			
	Alternative Tenders shall not be permitted.			
ITT 15.2	Alternative times for reaching the required Service Levels and for the completion of the Rehabilitation and/or Improvement <i>Works_will not be</i> permitted.			
ITT 15.4	Alternative technical solutions for the Rehabilitation and/or Improvement Works shall be permitted for the following parts of the Works: <i>Not Applicable</i>			
ITT 16.5	The prices quoted by the Tenderer shall be: <u>fixed</u> ; consequently, the Tenderer is not required to furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data.			
ITT 17.1	The currency(ies) of the Tender and the payment currency(ies) shall be in Kenya Shillings			
ITT 20.1	The Tender validity period shall be <u>140days</u> from the specified date of opening as <u>indicated in the invitation to Tender</u>			
ITT 21.1	A Tender Security of the amount specified in the Appendix to form of Bid <u>shall</u> <u>be</u> required.			
ITT 21.2 (iv)	Other types of acceptable securities: Not Applicable			
ITT 21.7	[The following provision should be included and the required corresponding information inserted <u>only</u> if a Tender Security is not required under provision ITT 21.7 and the Procuring Entity wishes to declare the Tenderer ineligible for a period of time should the Tenderer perform any of the actions mentioned in provision ITT 21.7 (a) or (b), Otherwise omit.]			
	If the Tenderer performs any of the actions prescribed in ITT 21.7 (a) or (b), the Procuring Entity will declare the Tenderer ineligible to be awarded contracts by the Procuring Entity for a period ofTwo (2) years.			
ITT 22.1	In addition to the original of the Tender, the number of copies is: <u>NONE</u>			
ITT 22.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: _ <u>Certificate of Independent Tender Determination Part B of Form of Tender</u>			

D. Submission and Opening of Tenders

ITT 24.1	(A) For <u>Tender submission purposes</u> only, the Procuring Entity's address is:				
	As indicated in the Invitation to Tender				
Tenders shall not be submitted electronically.					

ITT 27.1	The Tender opening shall take place at: <u>As indicated in the invitation to Tender</u>		
	The electronic Tender opening procedures shall be: <i>Not applicable</i>		
ITT 27.6	The Form of Tender and priced Bills of Quantitiesshall be initialed by representatives of the Procuring Entity attending Tender opening.		
	If initialization is required, it shall be conducted as follows:		
	 By all members of the Tender opening committee In the pages they shall deem appropriate 		

E. Evaluation and Comparison of Tenders

ITT 32.3	The adjustment shall be based on average price of the item or component as quoted in other substantially responsive Tenders. If the price of the item or component cannot be derived from the price of other substantially responsive Tenders, the Procuring Entity shall use its best estimate.			
ITT 35.1	The Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected/nominated by the Procuring Entity.			
ITT 35.2	The maximum volume of works that can be subcontracted is 40% of the total contract price.			
ITT 35.3	The sub contractor's qualifications <i>shall not</i> be used by the Tenderer to qualify for the Works.			
ITT 36.2	A margin of domestic preference shall apply. [If a margin of preference applies, the application methodology shall be defined in the Evaluation and Qualification Criteria]			
ITT 37.2 (d)	Additional requirements apply. These are detailed in the evaluation criteria in the Evaluation and Qualification Criteria.			
ITT 37.5	The combined price for the Rehabilitation and Improvement Works may not exceed the following threshold: NOT APPLICABLE of the total contract price excluding provisional sums [insert percentage]			
ITT 42.2	Where prequalification has not taken place, the Procuring Entity <i>shall</i> permit that specific experience for parts of the Works and Service may be met by Specialized Subcontractors.			
ITT 48.1	Contract negotiations with the best evaluated tenderer will be held at: (<i>Not Applicable</i>)			

ITT 53.1

The procedures for making a Procurement-related Complaint are available from the PPRA website info@ppra.go.ke or complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to:

For the attention: *Director General*

Procuring Entity: Kenya National Highways Authority (KeNHA)

Email address: dg@kenha.co.ke

In summary, a Procurement-related Complaint may challenge any of the following:

- (i) the terms of the Tender Documents; and
- (ii) the Procuring Entity's decision to award the contract.

SECTION IV - EVALUATION	N AND QUALIFICATION	ON CRITERIA	

SECTION IV - EVALUATION AND QUALIFICATION CRITERIA

1. General Provisions

- 1.1 Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the Kenya Shilling equivalent using the rate of exchange determined as follows:
 - a) For construction turnover or financial data required for each Year-Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
 - b) Value of single Contract-Exchange rate prevailing on the date of the contract signature.
 - c) Exchange rates shall be taken from the publicly available source identified in the ITT. Any error in determining the exchange rates in the Tender may be corrected by the Procuring Entity.
 - 1.2 This section contains the criteria that the Employer shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section V, Tendering Forms. The Procuring Entity should use the Standard Tender Evaluation Document for Goods and Works for evaluating Tenders.

Evaluation and contract award Criteria

The Procuring Entity shall use the criteria and methodologies listed in this Section to evaluate tenders and arrive at the Lowest Evaluated Tender. The tender that (i) meets the qualification criteria, (ii) has been determined to be substantially responsive to the Tender Documents, and (iii) is determined to have the Lowest Evaluated Tender price shall be selected for award of contract.

2. Preliminary Examination for Determination of Responsiveness

The Procuring Entity will start by examining all tenders to ensure they meet in all respects the eligibility criteria and other requirements in the ITT, and that the tender is complete and meets all the requirements of "Part 2 – Works and Services 'Requirements", including checking for tenders with unacceptable errors, abnormally low tenders, abnormally high tenders and tenders that are front loaded. The Standard Tender Evaluation Report Document for Goods and Works for evaluating Tenders provides very clear guide on how to deal with review of these requirements. Tenders that do not pass the Preliminary Examination will be considered irresponsive and will not be considered further.

[The Procuring Entity will provide the preliminary evaluation criteria. To facilitate, a template may be attached or clearly described all information and list of documentation to be submitted by Tenderers to enable preliminary evaluation of the Tender]

3. Assessment of Adequacy of Technical Proposal with Requirements (if Applicable)

The Procuring Entity will evaluate the Technical Proposals of all irresponsive tenders using the following criteria, sub-criteria, and point system for the evaluation of the Technical Proposals:

- i) History of non-performance
- ii) Financial capability
- iii) General and specific experience
- iv) Key personnel
- v) Contractors Plant and Equipment
- vi) Adequacy and quality of the proposed methodology, and work plan in responding to the schedule of Requirements:

Total points for the five criteria: 100points. The minimum technical score (St) required to pass is: 75points.

Tenderers who score less than the required pass will be automatically disqualified. Tenderers who pass the technical evaluation will be evaluated further.

4. Tender Evaluation (ITT 35)

Price evaluation: in addition to the criteria listed in ITT 35.2 (a) - (d) the following criteria shall apply:

i)	Alternative Completion Times, if permitted under ITT 13.2, will be evaluated as follows:
	NA

ii)	Alternative Technical Solutions for specified parts of the Works, if permitted under ITT
	13.4, will be evaluated as follows:
	NA

5. Multiple Contracts

Multiple contracts will be permitted in accordance with ITT 35.4. Tenderers are evaluated on basis of Lots and the lowest evaluated tenderer identified for each Lot. The Procuring Entity will select one Option of the two Options listed below for award of Contracts.

OPTION 1

- i) If a tenderer wins only one Lot, the tenderer will be awarded a contract for that Lot, provided the tenderer meets the Eligibility and Qualification Criteria for that Lot.
- ii) If a tenderer wins more than one Lot, the tender will be awarded contracts for all won Lots, provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the Lots. The tenderer will be awarded the combination of Lots for which the tenderer qualifies and the others will be considered for award to second lowest the tenderers.

OPTION 2

The Procuring Entity will consider all possible combinations of won Lots [contract(s)] and determine the combinations with the lowest evaluated price. Tenders will then be awarded to the Tenderer or Tenderers in the combinations provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won Lots.

6. Alternative Tenders (ITT 13.1)

An alternative if permitted under ITT 13.1, will be evaluated as follows:

The Procuring Entity shall consider Tenders offered for alternatives as specified in Part 2–Works and Services' requirements. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.

7. Margin of Preference

- 7.1 If the TDS so specifies, the Procuring Entity will grant a margin of preference of fifteen percent (15%) to be loaded one valuated price of the foreign tenderers, where the percentage of shareholding of Kenyan citizens is less than fifty-one percent (51%).
- 7.2 Contractors applying for such preference shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contractor or group of contractors qualifies for a margin of preference.

- 7.3 After Tenders have been received and reviewed by the Procuring Entity, responsive Tenders shall be assessed to ascertain their percentage of shareholding of Kenyan citizens. Responsive tenders shall be classified into the following groups:
- i) *Group A:* tenders offered by Kenyan Contractors and other Tenderers where Kenyan citizens hold shares of over fifty one percent (51%).
- ii) Group B: tenders offered by foreign Contractors and other Tenderers where Kenyan citizens hold shares of less than fifty one percent (51%).
- 7.4 All evaluated tenders in each group shall, as a first evaluation step, be compared to determine the lowest tender, and the lowest evaluated tender in each group shall be further compared with each other. If, as a result of this comparison, a tender from Group A is the lowest, it shall be selected for the award. If a tender from Group B is the lowest, an amount equal to the percentage indicated in Item 3.1 of the respective tender price, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each tender from Group B. All tenders shall then be compared using new prices with added prices to Group B and the lowest evaluated tender from Group A. If the tender from Group A is still the lowest tender, it shall be selected for award. If not, the lowest evaluated tender from Group B based on the first evaluation price shall be selected.

8. Post qualification and Contract ward (ITT 39), more specifically

- a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of prequalification data, if so required.
- b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award.

QUALIFICATION CRITERIA

Ite m No.	Qualification Subject	Qualification Requirement	Document To be Completed/provided by Tenderer	For Procuring Entity's Use (Qualificatio n met or Not Met)
A. PR	ELIMINARY EVA	LUATION		
1.	Nationality	Nationality in accordance with ITT 4.10	Forms ELI - 1.1, 1.2 and 1.3, with attachments	
2.	Goods, equipment and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 5.1	Forms ELI - 1.4	
3.	Conflict of Interest	No conflicts of interest in accordance with ITT 4.3	Form of Tender	
4.	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 4.6	Form of Tender - Form SD 1	
5.	State- owned Enterprise	Meets conditions of ITT 4.7	Forms ELI - 1.1 and 1.2, with attachments	
6.	Appendix to Form of Bid	Form properly filled & signed	Appendix to Form of Bid in the Prescribed Format	
7.	Suspension Based on Execution of Tender/Proposa 1 Securing Declaration by the Procuring Entity	Not under suspension based on-execution of a Tender/Proposal Securing Declaration pursuant to ITT 4.8.	To be confirmed from Internal records by the procuring entity	
8.	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to criteria established in 3.1 and assuming that all pending litigation will NOT be resolved against the Tenderer.	Form CON - 1	
9.	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer for the last three (3) years.	Form CON - 1	
10	Declaration of Fair	Bidders shall declare they are not guilty of	Form CON - 2	

	employment laws and practices	any serious violation of fair employment laws and practices and will be bound to abide by the industry CBA at minimum		
11	Declaration of Knowledge of Site /Pre-Bid Conference	 Attend Pre-Tender Site Visits as per TDS, ITT 7.1 Bidders to sign attendance register Certificate must be signed by the Employer's representative Bidders to send Technical Persons for the Site Visit – Min Qualifications – Diploma in Electrical Engineering 	Form CON - 3	
12	Tender Security	Tender Security document	Form in the Prescribed Format	
13	Priced Bill of Quantities	 Fill all rates, prices and amounts, NO Alterations of the Quantities accepted, All bidders own Corrections must be Countersigned NO ERRORS noted in the Bills of Quantities 	Bills of Quantity in the Prescribed Format	
14	Annual Practicing License with the National Construction Authority	Proof of registration with the National Construction Authority in Class 1 or 2 as Electrical Contractor	Copy of Current NCA Practicing License	
15	Annual Practicing License with the Energy & Petroleum Regulatory Authority	Proof of registration with the Energy & Petroleum Regulatory Authority (EPRA)in Class A	Copy of Current EPRA Practicing License	
16	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority in accordance with ITT 4.15.	Provide Valid Tax Compliance Certificate	
17	PBC Certificate	Bidders Bidding for PBC Tenders, at	Copy of PBC Certificate	

		least one of the Directors of the bidding company MUST have been trained in Performance Based Road Maintenance as a Contractor (PBC) by Kenya Institute of Highways and Building Technology (KIHBT) or any other Accredited Institution		
18	Technical Data for Main Items/ Equipment	Bidders shall provide technical data and specifications for Integrated Solar Modules.	 Brochures/Catalogues (1 copy) Manufacturer's Authorization & Warranty Manufacturer's Certificate or KEBS Certification for local manufacturer Manufacturer's Certificate or NEMA/energy policy certification on Environmental Management Policy 	
19	Serialization of the Bid	Bidders shall sequentially serialize all pages of each tender submitted. Any written Pages or document attached or inserted Documents MUST be sequentially serialized.	The Serialization MUST be numerically sequential starting from Numeric 1.	
20	Completeness of tender document	The person or persons signing the bid shall initial all pages of the bid where entries have been made. Bidders shall own all alterations made to the tender document. Bidders shall duly fill all relevant forms/schedules provided for in the document that requires entries	All pages with entries (Typed or hand written) must be initialed. Any alterations made in the tender document must be countersigned. All relevant Forms/ Schedules shall be duly filled	

B. TE	B. TECHNICAL EVALUATION					
1.	History of Non- Performing Contracts	Non-performance of a contract did not occur as a result of contractor default for the last three (3) years. Non-performance shall be deemed to have occurred by evidence of: • Termination Letter • Liquidated Damages	Form CON-1 If a bidder fails to disclose, shall be disqualified Reference to be made to procuring Authority's records A bidder (Company and/or Director(s)) with any history of non-performance losses 10 marks	10 Marks		
2.	Financial Capabilities	(i) Bidders shall provide audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last <i>3 years</i> shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability (as demonstrated by Financial Evaluation ratios).	Form FIN - 3.1, with attachments Attachments include: i. Audited accounts All pages must be initialed and stamped by both a practicing Auditor registered with ICPAK and one of the Directors. Auditor's practicing membership number from ICPAK must be indicated and a valid practicing license shall be provided. The Financial ratio Form to be signed by the Auditor registered with ICPAK and one of the Directors • Financial Ratios Computation shall be made for the following Ratios and marks awarded to each of the ratios: -Working Capital - Debt to Equity Ratio - Current ratio	10 Marks 1 Mark 4 Marks		
		(ii) The Tenderer shall demonstrate that it has access to, or has available, liquid assets,	 Operating Cash Flow ratio Line of Credit 			

		unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated at a minimum of 10% of Engineer's Estimate for the subject contract(s) net of the Tenderer's other commitments.	Bank statements Etc.	4 Marks
		The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.		
	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings 200 Million, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 3 year years, divided by 3 years	Form FIN - 3.2 Attachments include Financial Statements	1 Marks
3.	Ongoing Works	Value of outstanding works shall not be more than the Engineer`s Estimate	Form FIN - 3.4 If the outstanding Works is more than the Engineer's Estimate of this bid, the bidder loses	2marks
	General Street Lighting Experience	Experience under street lighting contracts in the role of prime contractor, JV member, subcontractor, or management contractor, substantially completed in the last [5 years] prior to the applications submission deadline.	Form EXP -4.1 Attach Letters of Award and Completion Certificates	3 Marks (1 Mark for each General Street Lighting project)
	Specific	Participation in	Form EXP 4.2(a)&(b)	

	Street Lighting &Contract Management Experience	contract (s) of a similar nature with minimum cumulative value of <i>KShs 400 million</i> as filled in Form EXP 4.2(a) that have been satisfactorily and substantially completed by the bidder, as a prime contractor, joint venture member, management contractor or sub-contractor in the last [5 years] prior to the applications submission deadline. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics	Provide Letters of Award and Completion Certificates For subcontracted works, the bidder should provide the following; • Award letter of the main contractor • Award letter of the subcontract. • Completion letter of the subcontract. • Subcontract approval from the Engineer/supervision Authority	10 Marks
4.	Contractor's Representative and Key Personnel	Curriculum Vitae (CVs) of the Proposed Key Staff must be presented in the provided format and duly signed by the proposed individual. Copies of certificates and Annual Practicing Licenses (for Engineers) and Academic Certificates for all staff is mandatory	Schedule F (Form PER. 1 and PER. 2)	10 Marks
5.	Contractors key equipment	Bidders shall declare they have possession/Ownership of various equipment as proposed to be used in the Project by providing Logbooks that demonstrate proof of ownership For Bidders planning to hire, they shall provide an Active Lease Agreement in Place that can be used during the Project Life. The copy of logbooks of the lessor(s) shall also be provided.	Schedule D of Technical Proposal	35 Marks

	Main Scope of Works of this	Main Equipment Quantity (No) (Minimum	Marks (S	Marks (Score)	
	Tender)	Owned	Hire d	
		Man lift crane (Minimum of 15m height)	15	7.5	
		Truck crane (Minimum of 3 1 tonnes)	10	5	
	Street lighting Maintenance and Improvement	Site Pickup (any type) for Patrol	5	2.5	
	improvement	Other equipment i) Generator ii) Wielding Machine iii) Grinder iv) Drilling Machine	5	2.5	
	Total		35	17.5	
6. Proposed methodology	Adequacy and quality of the proposed methodology	 a) Technical approach and methodology Provide a detailed Work Methodology a) Procedure on execution of activities as outlined in the BoQs b) Allocation of machinery/labour in execution the activities c) Procedures in quality control of the activities described in BoQs Provide a Methodology on safety during the construction period a) Personal protective equipment b) Signages c) Delineation of construction and passage of traffic d) Passage of traffic at 	3 Marks 2 Marks 4 Marks		
		night	2 Marks		

		 Provide a specific Quality management plan Contractor to establish objectives b) Contractor to provide processes/procedur es to execute the contract c) Bidders to describe resources allocation in the execution of the contract d) Bidders to 	2 Marks 2 Marks 3 Marks
		demonstrate control of non- conformities e) Bidders to identify the potential risks and their mitigation strategies in the execution of the contract. b) Work plan/ Program of Works (PoW) • PoW Resourced with Equipment-Min. allocation pursuant to the Schedule E of Technical Proposal - To be submitted in A3 Size Paper well legible Fonts • PoW captures Monthly outputs for each activity • PoW details BoQ Quantities, Units and Rates • PoW is superimposed with Cashflow Projections as detailed in Schedule A of the technical proposal c) Site Organization and staffing (Schedule B of Technical proposal)	
Knowledge	Transfer of knowledge	a)Relevance of training	

Transfer [When transfer of knowledge is a particularly important component of the assignment, the following sub-criteria may be provided]	(training) program (relevance of approach and methodology	program [Not Applicable] b)Training approach and methodology [Not Applicable] c) Qualifications of experts and trainers [Not Applicable]	
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Tenderers who score less than the required pass (75%) will be automatically disqualified. Tenderers who pass the technical evaluation will be evaluated further.

C. FINANCIAL EVALUATION:

The lowest evaluated bidder may be subjected to Financial Evaluation which include but not limited to sensitivity analysis of the rates and meeting requirements of TDS –ITT 37.5

D. POST QUALIFICATION: The procuring entity may verify the documents provided by the bidder with the issuing authority.

ITE M	DESCRIPTION					
1	HISTORY OF NON-PERFORMANCE					
1	History of Non-Performance					
	FINANCIAL CAPA	CITY			Max 10	
	Audited Statements				0-1	
2	Computation of Finan	cial Ratios			0-4	
	Working capital to be at least 10% of the EE					
	Turnover				0-1	
	EXPERIENCE				Max 15	
3	General Experience				0-3	
	Specific experience in	related work	KS		0-10	
	Workload Analysis				0-2	
	KEY PERSONNEL	<u> </u>			Max 10	
	Site Agent / Road Manager	Certification		PBC Certificate from KIHBIT or other recognized institution	2	
				T2 or T3 EPRA Solar License	2	
4		Qualificati	on	Degree and Registered with EBK with proof of current practicing license or subscription for Graduate Engineers	1	
4		Relevant experience Above 5 years 0-5 years			1	
				0		
		Specific ex	xperience	Degree (Registered with EBK with proof of current practicing license or subscription for Graduate Engineers)	2	
	Foreman			HND (Proof of registration with KETRB)	1	
				Diploma (Proof of registration with KETRB)	0	
		Relevant e	xperience	Above 5 years	2	
				0-5 years	0	
		PLANT A	ND EQUIP	MENT	Max 35	
5	Relevant Equipme		Owned (Max 35marks)		0-35	
	Detailed in Sched	lule D)	100%	Leased (Max 17.5 marks)	0-17.5	
6	PROGRAM OF WO	RKS AND	WORK ME	THODOLOGY	Max 20	

I	Ī		
	Work Methodology	Provided a detailed Work Methodology	0-3
ба		Provided a Methodology on safety during the construction period	0-2
		Provided a specific Quality management plan	0-2
		PoW Resourced with Equipment-Min. allocation pursuant to the Schedule E of Technical Proposal - — To be submitted in A3 Size Paper well legible Fonts	0-4
6b	Program of Works	PoW captures Monthly outputs for each activity	0-2
		PoW details BoQ Quantities, Units and Rates	0-2
		PoW is superimposed with Cashflow Projections as detailed in Schedule A of the technical proposal	0-2
7	Organization and staffing (Schedule B of Technical proposal) Equivalent of Site Base facilities		0-3
	TOTAL	Equivalent of Site Dase facilities	MAX 100

SECTION V - TENDERING FORMS

SECTION V - TENDERING FORMS

- 1. TENDERER'S QUALIFICATION FORMS
 - Form ELI-1.1- Tenderer Information Form
 - Form ELI- 1.2- Tenderer JV information
 - Form ELI 1.3- Qualification of Foreign Contractors
 - Form ELI 1.4- Declarations of materials, equipment and labor sources
- 2. FORM OF TENDER
 - A. TENDERER'S ELIGIBILITY CONFIDENTIAL BUSINESS QUESTIONNAIRE
 - B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION
 - C. SELF-DECLARATION FORMS

FORM SD1

FORM SD2

FORM SD3

APPENDIX TO FORM OF TENDER

- 3. CONTRACTUAL FORMS
 - FORM CON 1
 - FORM CON 2
 - FORM CON 3
- 4. FINANCIAL FORMS
 - FORM FIN- 3.1
 - FORM FIN- 3.2
 - FORM FIN- 3.3
- 5. TECHNICAL EXPERIENCE
 - FORM EXP 4.1
 - FORM EXP 4.2 (A)
 - FORM EXP 4.2 (B)
- 6. TECHNICAL PROPOSAL
 - SCHEDULE A. Projected Cash Flow
 - SCHEDULE B. Site Organizations
 - SCHEDULE C. Subcontractors
 - SCHEDULE D. Contractor's Equipment
 - SCHEDULE E. Initial Tentative Program of Performance
 - SCHEDULE F. Key Personnel Proposed
 - FORM PER -1
 - FORM PER -2
 - SCHEDULE G. Schedule of Materials; -Basic Prices
- 7. FORM OF TENDER SECURITY DEMAND GUARANTEE
- 8. FORM OF TENDER SECURITY (TENDER BOND)
- 9. FORM OF TENDER-SECURING DECLARATION

TENDERER'S QUALIFICATION FORMS

FORM ELI-1.1- TENDERER INFORMATION FORM

Form ELI-1.1
Tenderer Information Form
Date:
Tender No
Tender title:
Tenderer's name:
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration:
[indicate country of Constitution]
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information
Name:
Address:
Telephone/Fax numbers:
E-mail address: 1. Attached are copies of original documents of:
1. Attached are copies of original documents of:
I. Certificate of Incorporation and CR12 of the legal entity named above, in accordance with ITT 4.1.
II. Copies of National Identification documents for Directors
☐ In case of a JV, Form of intent to form JV or JV agreement, in accordance with ITT 4.1.
☐ In case of a state-owned enterprise or institution, in accordance with ITT 4.7. documents establishing:
Legal and financial autonomy
 Operation under commercial law Establishing that tenderer is not under the supervision of the Procuring Entity,
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership (<i>Not Applicable</i>).
2. Included are the organizational chart, a list of board of Directors, and the beneficial ownership (Not Appacable).

FORM ELI- 1.2- TENDERER JV INFORMATION

Tenderer's JV Information Form (to be completed for each member of Tenderer's JV) Date:_____ Tender No. Tender title: Tenderer's JV name: JV member's name: JV member's country of registration: JV member's year of constitution: JV member's legal address in country of constitution: JV member's authorized representative information Name: Address: Telephone/Fax numbers: E-mail address:____ Attached are copies of original documents of: 1. Certificate of Incorporation and CR 12 of the legal entity named above, including Registered JV agreement (Registration of Documents Act), in accordance with ITT 4.1. Copies of National Identification documents for all Directors ii. In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 4.7. 2.Included are the organizational chart, a list of Board of Directors, and the beneficial ownership (*Not* Applicable).

FORM ELI - 1.3- QUALIFICATION OF FOREIGN CONTRACTORS

Qualification of Foreign Tenderers

Pursuant to ITT 4.10, a foreign tenderer must complete this form to demonstrate that the tender fulfils this condition (the 40% Rule).

ITEM	Description of Work Item	Describe location of source	COST in K. shillings	Comments, if any
A	Local Labour			
1				
2				
3				
4				
5				
5 B	Sub contracts from Local source	es		
1				
2				
3				
4				
5				
С	Local materials			
1				
2				
3				
3				
4				
5 D	Hea of Local Dlant and Equipme	nnt .		
D	Use of Local Plant and Equipme			
1				
•				
2				
3			-	
4				
- T				
5				
E	Add any other items			

1				
2				
3				
4				
5				
6				
7				
	TOTAL COST LOCAL CONTEN	NT	XX	
	PERCENTAGE OF CONTRACT	PRICE	XX	

FORM ELI - 1.4- DECLARATIONS OF MATERIALS, EQUIPMENT AND LABOUR SOURCES

Pursuant to ITT 5.1, tenderers must complete this form to demonstrate that the tender fulfils this condition

ITEM	Description of Work Item	Describe location of source	Comments, if any
A	Materials		
_			
1			
2			
3			
4			
_			
5			
6 B	Equipment		
1			
2			
3			
4			
5 C	Labour		
	Laboui		
1			
2			
2			
3			
4			
5			
6			
	TOTAL COST LOCAL CONT		
	PERCENTAGE OF CONTRAC	LI TRICE	

FORM OF TENDER

INSTRUCTIONS TO TENDERERS

- (i) The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.
- (ii) All italicized text is to help Tenderer in preparing this form.
- (iii) Tenderer must complete and sign and TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE, CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION OF THE TENDERER, all attached to this Form of Tender.
- iv) The Form of Tender shall include the following Forms duly completed and signed by the Tenderer.
 - A) Tenderer's Eligibility- Confidential Business Questionnaire
 - B) Certificate of Independent Tender Determination
 - C) Self-Declaration of the Tenderer

FORM OF TENDER

We, the undersigned, declare that:

- a) *No reservations:* We have examined and have no reservations to the tendering document, including Addenda issued in accordance with Instructions to Tenderers (ITT) ;
- b) Eligibility: We meet the eligibility requirements and have no conflict of interest in accordance with ITT4;
- c) *Tender-Securing Declaration:* We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing Declaration or Proposal-Securing Declaration in Kenya in accordance with ITT 4.8.
- d) *Conformity:* We offer to execute in conformity with the tendering document and in accordance with the construction or service schedule the following Works:

[Tender Number and Name]

e) Tender Price: The total price of our Tender is [name of currency] (amount in figures and words).

- f) Combined Price: We hereby confirm that our combined price for Rehabilitation Works and Improvement Works does not exceed the threshold given in the TDS ITT 37.5, which is [Not Applicable].
- g) Tender Validity Period: Our Tender shall be valid for a period specified in TDS 18.1 (or as amended if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (or as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- h) *Performance Security:* If our Tender is accepted, we commit to obtain a Performance Security in accordance with the tendering document;
- i) One Tender per Tenderer: We are not submitting any other Tender (s) as an individual Tenderer, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT 4.4, other than alternative Tenders submitted in accordance with ITT 13;
 - a) Suspension and Debarment: We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Procuring Entity. Further, we are not ineligible under Kenya laws or official regulations or pursuant to a decision of the United Nations Security Council;
 - b) State-owned enterprise or institution: [select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITT 4.7];
 - c) Commissions, gratuities and fees: We have paid, or will pay the following commissions, gratuities, or fees with respect to the Tendering process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.").

- d) *Binding Contract:* We understand that this Tender, together with your written acceptance thereof included in your Form of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- e) *Not Bound to Accept:* We understand that you are not bound to accept the lowest evaluated cost Tender, the Best Evaluated Tender or any other Tender that you may receive;
- f) Fraud and Corruption: We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;
 - g) Collusive practices: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.
- r) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from www.ppra.go.ke during the procurement process and the execution of any resulting contract.
- s) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:
 - a) Tenderer's Eligibility; Confidential Business Questionnaire to establish we are not in any conflict to interest.
 - b) Certificate of Independent Tender Determination to declare that we completed the tender without colluding with other tenderers.

- a) Self-Declaration of the Tenderer to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
- b) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal.
- t) Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in "Appendix 1- Fraud and Corruption" attached to the Form of Tender.

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

Name of the person duly authorized to sign the Tender on behalf of the Tenderer: **[insert complete name of person duly authorized to sign the Tender]

Title of the person signing the Tender: [insert complete title of the person signing the Tender] Signature of the person named above: [insert signature of person whose name and capacity are shown above] Date signed [insert date of signing] day of [insert month], [insert year]

Name

In the capacity of

Signed

Signed

Duly authorized to sign the Tender for and on behalf of M/s

Dated on ______day of _______, _____

A. TENDERER'S ELIGIBILITY - CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

Tender is instructed to complete the particulars required in this Form, one form for each entity if Tender is a JV. Tenderer is further reminded that it is an offence to give false information on this Form.

a) Tenderer's details

	ITEM	
1	Name of Procuring Entity	Kenya National Highways Authority
2	Reference Number of the Tender	
3	Date and Time of Tender Opening	
4	Name of Tenderer	
5	Full Address and Contact Details of the Tenderer	 Country City Location Building Floor Postal Address Name and email of contact person
6	Current Trade License Registration Number and Expiring date Name, country/County and full address (postal and physical addresses, email, and telephone number) of	
	Registering Body/Agency	
7	Description of Nature of Business	
8	Maximum value of business which the Tenderer handles	
9	State if Tenders Company is listed in stock exchange, give name and full address (postal and physical addresses, email, and telephone number) of state which stock exchange	

General and Specific Details

b) Sole Proprietor, provide the following details

	Name in full		A	ge
	Nationality		C	ountry of Origin
	Citizenship			
)	Partnership, provide the	following details.		
	Name of Partners	Nationality	Citizenship	%Shares Owne
1				
2				
3				
	ii) State the nominal ar	_	Company-	
	Issued Kenya Shillings (E			
	iii) Give details of Direct	ctors as follows.		
L			Citizenship	%Shares Owned
	iii) Give details of Direct	ctors as follows.		
2	iii) Give details of Direct	ctors as follows.		
1 2 3 e)	iii) Give details of Directors Name of Directors DISCLOSURE OF INTE i) Are there any person interest or relationsh	REST - Interest of the in/persons in	Citizenship Firm in the Procur (Name o	%Shares Owned ring Entity. f Procuring Entity) who has/have
3	DISCLOSURE OF INTE	CREST - Interest of the in/persons in	Firm in the Procur	%Shares Owned ring Entity. f Procuring Entity) who has/have
3	DISCLOSURE OF INTE i) Are there any person interest or relationsh	CREST - Interest of the in/persons in	Firm in the Procur	%Shares Owned ring Entity. f Procuring Entity) who has/have
3	DISCLOSURE OF INTE i) Are there any person interest or relationsh	REST - Interest of the in/persons in	Firm in the Procur	%Shares Owned ring Entity. f Procuring Entity) who has/have Interest or Relationship

KeNHA/R5/166/2021

	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 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	Tender has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering 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 tender.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender 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 Tender document or specifications of the Contract, and/or the Tender 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 such 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 tendering process and execution of the Contract.		

f) 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)

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

	AUTHORITY for: [Name of tender
	[Tender number
	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:
	I have read and I understand the contents of this Certificate;
	I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;
	I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer;
	For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
	Has been requested to submit a Tender in response to this request for tenders;
	could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience;
	The Tenderer discloses that [check one of the following, as applicable]:
	The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement or arrangement with, any competitor;
	the Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complet details thereof, including the names of the competitors and the nature of, and reasons for, such consultation communications, agreements or arrangements; 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:
	prices;
	methods, factors or formulas used to calculate prices;
	the intention or decision to submit, or not to submit, a tender; or
	the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5) (b) above;
	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 requestion tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5) (b) above;
	the terms of the Tender 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 tender opening, or of the awarding of the Contrac whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5) (by above.
ın	ne and Title
ate	
ıις	[Name, title and signature of authorized agent of Tenderer and Date]

1.

2.

3.

4.

5.

6.

7.

8.

C. SELF-DECLARATION FORMS

FORM SD 1: SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT 2015

I,		, of Post Office Box	being a resident of			
	in the Republic of	ofdc	hereby make a statement as follows: -			
1.	THAT I am the Company Secretary/	Chief Executive/Managing Direc	tor/Principal Officer/Director of			
		(insert name of the Company	v) who is a Bidder in respect of Tender			
	Nofor		(insert tender			
	title/description) for (insert name of the Procuring entity) and duly					
	authorized and competent to make this statement.					
2.	THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.					
3.	THAT what is deponed to herein above is true to the best of my knowledge, information and belief.					
	(Title)	(Signature)	(Date)			
	Bidder Official Stamp					

FORM SD 2: SELF DECLARATION THAT THE TENDERER WILL NOT ENGAGE IN

ANY CORRUPT OR FRAUDULENT PRACTICE

I,		of P. O. Box	•••••	being a resident of	
	in the Republic o	f	do hereb	by make a statement as follows	: -
1.	THAT I am the Chief Executive/Manag				••••
	name of the Procuring entity) and du		•		rt
2.	THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of				,
3.	THAT the aforesaid Bidder, its servants member of the Board, Management, Staf procuring entity).				
4.	THAT the aforesaid Bidder will not engage/has not engaged in any corrosive practice with other bidders participating in the subject tender				;
5.	THAT what is deponed to herein above is true to the best of my knowledge information and belief.				
(Title	e)	(Signature)	(Date)		
Bidd	ler's Official Stamp				

FORM SD 3: DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I,	(person) on behalf of (Name of the
Business/Company/Firm)	declare that I have read and fully
understood the contents of the Public Procurement & Asset Dispos	sal Act, 2015, Regulations and the Code of
Ethics for persons participating in Public Procurement and Asset l	Disposal and my responsibilities under the
Code.	
I do hereby commit to abide by the provisions of the Code of Ethic	es for persons participating in Public
Procurement and Asset Disposal.	
Name of Authorized signatory	
Sign	
Position	
Office address.	Telephone
E-mail	
Name of the	
Firm/Company	
Date	
(Company Seal/ Rubber Stamp where applicable)	
Witness	
Name	
Sign	
Date	

APPENDIX TO FORM OF TENDER

(This appendix forms part of the bid)

CONDITIONS OF CONTRACT	CLAUSE	AMOUNT/DESCRIPTION
Bid Security (Bank Guarantee Only)		Kshs. 200,000
Amount of Performance Security (Unconditional Bank Guarantee)	10.1	5% of Tender Sum in the form of Unconditional Bank Guarantee
Program to be submitted	14.1	Not later than Fourteen (14) days after issuance of Order to Commence in the format Prescribed in the Tender Document
Cash flow estimate to be submitted	14.3	Not later than Fourteen (14) days after issuance of Order to Commence
Minimum amount of Contractor's All risk Insurance	23.2	Contract Price
Period for commencement, from Engineer's order to commence	41.1	14 days
Time for completion of Instructed works	43.1	Twenty four (24) months
Contract Period	43.1	Thirty Six (36) months
Defects Liability period for Works	49.1	Twelve (12) months
Period of Contract Validity	60	From contract signing up to the date of settlement of the agreed final statement issued pursuant to clause 60.6.
Advance Payment	60.12	The Employer MAY pay up to a maximum of 10% of Contract Sum subject to availability of funds.
Advance Payment Security	60.12	Full amount of the advance in the form of Unconditional Bank Guarantee (Insurance bonds shall not be accepted)
Penalty for delayed payment of RE's staff wages	34.4	0.5% of the amount of instructed wages per day
Limit of penalty for delayed payment of RE'S staff wages	34.4	Rate quoted for bill item 01-80-031A
Amount of liquidated damages	47.1	0.1% of Contract Price per day
Limit of liquidated damages	47.1	5% of Contract Price
Percentage of Retention	60.3	5% of Interim Payment Certificate
Limit of Retention Money	60.3	5% of Contract Price
Minimum amount of interim certificates	60.2	Amount equivalent to payment for 100% PBC compliance
Time within which payment to be made after Interim Payment Certificate signed by Engineer	60.10	90 days
Appointer of Adjudicator	67.3	The Chartered Institute of Arbitrators (Kenya)

The Dire Kenya N (KeNHA P.O. Box NAIROE The Engi The Dire Managen Kenya N (KeNHA P.O. Box NAIROE The Con Name	A 49712 - 00100 BI Ineer's address is: ctor, Road Asset & Corridor nent ational Highways Authority), 49712 - 00100
---	--

Signature of Tenderer.....

Date

FORM CON – 1 HISTORICAL CONTRACT NON-PERFORMANCE, PENDING LITIGATION AND LITIGATION HISTORY

Tenderer's Name:						
Date:						
JV Member's Name						
Tender No	Tender No					
			h Section III, Evaluation and Qualification Criteria			
			the last three (3) years from the day of tender openin (3) years from the day of tender opening	g.		
Year	Non-		act Identification	Total Contract Amount		
Tear	performed portion of contract	Conti	act Identification	(Kenya Shilling equivalent)		
[insert year]	[insert amount and percentage]	name/i Name Addre	nct Identification: [indicate complete contract number; and any other identification] of Procuring Entity: [insert full name] ss of Procuring Entity: [insert street/city/country] n(s) for nonperformance: [indicate main reason(s)]	[insert amount]		
Pending Litigation,	in accordance with	h Section	n III, Qualification Criteria and Requirements			
			Section III, Qualification Criteria and Requirements,			
Year of dispute	Pending Litigation in accordance with Se Year of dispute Amount in dispute (currency)		Contract Identification Contract Identification	Total Contract Amount (Kenya Shilling equivalent)		
			Contract Identification: Name of Procuring Entity: Address of Procuring Entity: Matter in dispute: Party who initiated the dispute: Status of dispute:	equivalent		
Litigation History in accordance with Section III, Evaluation and Qualification Criteria						
No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4. Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below						
Year of award Outcome as percentage of Net Worth		et	Contract Identification	Total Contract Amount (Kenya Shilling equivalent)		

(To be signed by authorized representative and officially stamped)

FORM CON – 2: DECLARATION FORM – FAIR EMPLOYMENT LAW AND PRACTICES

FORM CON – 3: CERTIFICATE OF BIDDER'S VISIT TO SITE

This is to certify that

[Name/s]	
	••
Being the authorized representative/Agent of [Name of	bidder]
participated in the organized inspection visit of the site of	of the works for the
PERFORMANCE BASED CONTRACT FOR TH	E MAINTENANCE OF STREET
LIGHTING ON ATHI RIVER - E	
held onday of	20
Signed	
(Employer's Representative)	
(Name of Employer's Representative)	(Designation)
NOTE: This form is to be completed at the time of the or	ganized site visit.

FORM FIN – 3.1: FINANCIAL SITUATION AND PERFORMANCE

PART 1

Tenderer's N	ame:		
Date:			
JV Member's	Name		
Tender No			
Tender title:			

1. Financial data

Type of Financial information (Kenya Shillings)	Historic information for previous 3 years,				
	(amount in Millions (KSh.)				
	2018	2019	2020		
Statement of Financial Position (Information	on from Balance Sh	heet)			
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (Kenya Shilling equivalent)
1	Letter of line of Credit from a recognized Financial Institution	
2	Bank account balance (demonstrated by bank statements)	

3. Financial documents

The Tenderer and its parties shall provide copies of financial statements for the last *Three* (3) years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- a) Reflect the financial situation of the Tenderer or in case of JV member, and not an affiliated entity (such as parent company or group member).
- b) Be independently audited or certified in accordance with local legislation.
- c) Be complete, including all notes to the financial statements.
- d) Correspond to accounting periods already completed and audited.
 - Attached are copies of financial statements for the Three (3) years required above; and complying with the requirements

PART 2

Detailed Financial Situation Evaluation

No.	Description	Auditors Assessment 2018	Auditors Assessment 2019	Auditors Assessment 2020	Evaluation Score Award Criteria
1.	Financial Ratios				Max score=4 Marks
a.	Current Ratio= <u>Current Assets</u> Current Liabilities				Current Ratio more than 1 = 1 marks
b.	Debt to Equity Ratio = Total Liabilities Total Equity				Equity Capital Ratio less than 1 = 1 Marks
c.	Working Capital = Current Assets- Current Liabilities				Positive Working Capital = 1 marks
d.	Operating Cash Flow Ratio = Cash Flow from Operations Current Liabilities				Operating Cash-flow more than 1 = 1 marks
2.	Working Capital in Ks	sh	····	f	Working Capital is equal or more than 10% of Engineers Estimate= 4 Marks

The above Financial Ratios have to be derived from first Principles from the Audit Statements. The Auditor who has undertaken the analysis has to demonstrate the financial ratios and append his signature and stamp to the Document as below:

The Auditor shall be required to provide his/her workings and demonstrate the source of the workings from the various Audited statements by including the Page Numbers and references of the source of the figures used in the computation of the assigned values.

The Auditor undertaking the above Financial Analysis MUST duly fill the Contact Sheet below in all aspects and attach current annual practising license.

Financial ratios Computed by a Certified Public Accountant:

CPA: Name		
ICPAK Number		
Telephone Number		
Email Address		
Postal Address		
Physical Address		
Contact Person		
Mobile Contact of the Contact Person		
Signature		
Date		
Personal/Corporate		
Stamp		
Ratios attested by the Com	pany Direct	tor:
Ratios attested by the Com Director's Name	pany Direct	tor:
	pany Direct	tor:
Director's Name	pany Direct	tor:
Director's Name ID/Passport Number	pany Direct	tor:
Director's Name ID/Passport Number Telephone Number	pany Direct	tor:
Director's Name ID/Passport Number Telephone Number Email Address	ipany Direct	tor:
Director's Name ID/Passport Number Telephone Number Email Address Postal Address	pany Direct	tor:
Director's Name ID/Passport Number Telephone Number Email Address Postal Address Physical Address	pany Direct	tor:
Director's Name ID/Passport Number Telephone Number Email Address Postal Address Physical Address Signature	pany Direct	tor:

FORM FIN – 3.2: AVERAGE ANNUAL CONSTRUCTION TURNOVER

Tenderer's Name:			
Date:			
JV Member's Name			
Tender No			
Tender title:			
	 Annual turnover	<u>data (construction o</u>	only)
Year	Currency ount and indicate	Exchange Rate (where applicable)	Kenya Shilling equivalent
2018			
2019			
2020			
Average Annual Construction			
Turnover*			

If the most recent set of financial statements is for a period earlier than 12 months from the date of Bid, the reason for this should be justified.

^{*} See Section III, Evaluation and Qualification Criteria.

FORM FIN - 3.3: CURRENT CONTRACT COMMITMENTS / WORKS IN PROGRESS

Tenderers and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a Form of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

	rrent Contract Commitn	nents	1	
No.	Name of Contract	Procuring Entity's Contact Address, Tel, Fax	Value of Outstanding Work (Kenya Shilling equivalent)	Average Monthly Invoicing Over Last Six Months [KSh./month]

FORM EXP - 4.1: GENERAL CONSTRUCTION EXPERIENCE

Tenderer's Name:	
Date:	
JV Member's Name	
Tender No	

Starting Year	Ending Year	Contract Identification	Role of Tenderer	
		Contract name:	Main Contractor/ Subcontractor/	
		Brief Description of the Works and Services performed by the Tenderer:	Management Contractor	
		Amount of contract:		
		Name of Procuring Entity:		
		Address:		
		Contract name:		
		Brief Description of the Works and Services performed by the Tenderer:		
		Amount of contract:		
		Name of Procuring Entity:		
		Address:		
		Contract name:		
		Brief Description of the Works and Services performed by the Tenderer:		
		Amount of contract:		
		Name of Procuring Entity:		
		Address:		

FORM EXP - 4.2(A): SPECIFIC CONSTRUCTION AND CONTRACT MANAGEMENT EXPERIENCE

	1		
Prime Contractor	Member in JV	Management Contractor	Sub- Contractor
		Kenya Shillings	
	Informatio Prime Contractor	Information Prime Member in Contractor JV	Information Prime Member in Contractor U D D

FORM EXP - 4.2(B): CONSTRUCTION EXPERIENCE IN KEY ACTIVITIES

Tenderer's Name:					
Date:					
Tenderer's JV Member Name:					
Sub-contractor's Name (as per ITT 33.2):					
Tender No.					
Tender title:					
All Sub-contractors for key activities must compliant in Qualification Criteria and Requirements, Sub 1. Key Activity No One:	-Factor 4.2.			-	2 and Section
	Information	n			
Contract Identification					
Award date					
Completion date					
Role in Contact	Prime Contractor	Mer JV	nber in	Management Contractor	Sub- Contractor
Total Contract Amount				Kenya Shillir	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity the contract	y in	Percen partici (ii)	•	Actual Quantity Performed (i)*(ii)
Year 1					
Year 2					
Year 3					
Year 4					
Procuring Entity's Name:					
Address:					
Telephone/fax number					
F-mail:					

Information	
Description of key activities in accordance with Sub-Factor 4.2(b) of Section III:	
If applicable	
2. Activity No. Two	
3	

TECHNICAL PROPOSAL

The Tenderer's Technical Proposal shall include the following elements:

SCHEDULE A. Projected Cash Flow

SCHEDULE B. Site Organizations

SCHEDULE C. Subcontractors

SCHEDULE D. Contractor's Equipment

SCHEDULE E. Initial Tentative Program of Performance

SCHEDULE F. Key Personnel Proposed

Instructions on how to present the various schedules of the Technical Proposal are given on the following pages

SCHEDULE A

Projected Cash Flow

- 1) Tenderers shall tabulate below estimates, based on their preliminary work programme, of:
 - a) On the expenditure side, the value of the work which will be carried out;
 - b) On the revenue side, the net payments to which they will become entitled with due allowance for the advance payment and repayment, materials prepayments, and retention money, but excluding price adjustments for rise and fall and provisional sums for emergency works.
 - c) The projected net cash flow during the contract period.
- 2) The prospective successful Tenderer may be required to submit full details to substantiate his estimates.

3)

Period (Months)	Cost of Services	Maintenance	Cost of Rehabilitat Improvement Works	ion and	Net Paymen received	t to be	Net Cashflow
1-6							
7-12							
13-18							
19-24							
25-30							
31-36							
ETC							

SCHEDULE B

Site Organization

Tenderers shall give below full particulars of the organization they propose to establish, direct, and administer the performance of the Contract. In particular, Tenderers shall indicate the location of site camps and the resources they intend to allocate to Self-Control Units for planning and monitoring purposes.

- 1. SITE ORGANIZATION CHART
 - i. ORGANOGRAM
 - ii. SITE ORGANISATION LAYOUTS
 - iii. SITE LOCATION MAP
- 2. NARRATIVE DESCRIPTION OF SITE ORGANIZATION CHART

SCHEDULE C

SUB-CONTRACTORS / PARTNERS

Tenderers shall list below those parts of the Works and Services which they propose to subcontract, and state the approximate value of those parts and the names and addresses of the proposed subcontractors, if those are known at Tendering stage. Tenderers shall also list other business partners involved in the execution of the contract and their respective roles and responsibilities.

Part of Works / Services:
Approximate value:
Name and address of proposed subcontractor / partner:
Part of Works /
Services:
Approximate
value:
Name and address of proposed subcontractor / partner:
Part of Works /
Services:
Approximate
value:
Name and address of proposed subcontractor / partner:
Part of Works /
Services:
Approximate
value:
Name and address of proposed subcontractor / partner:

SCHEDULE D

Contractor's Equipment Form EQU

The Tenderer shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed in Section B (Technical Evaluation) of Qualification Form/Criteria

Equipment Information and current status for equipment leased from Government Agencies may be omitted Item of equipment Equipment Name of manufacturer Model and power rating information Capacity Year of manufacture Current Status Current Location Details of current commitments Source Indicate source of equipment Owned Rented Specially manufactured Leased Omit the following information for equipment owned by the Tenderer. Owner Name of owner Address of owner Telephone Contact name and title Fax Details of rental/lease/manufacture agreements specific to the project Agreements

SCHEDULE E

Initial Tentative Program of Performance

To demonstrate a clear understanding of the requirements of the Contract, Tenderers shall provide the following:

- i) A bar chart sub-divided into sections for each road showing the major activities to be carried out for Maintenance Services, Rehabilitation Works and Improvement Works, if any. The activities shall be shown against time, with linkages shown between related/sequential activities as far as possible and appropriate.
- ii) A bar chart or schedule showing the usage of major plant, including those listed in Schedule D (Contractor's Equipment).

SCHEDULE F

Form PER -1 Key Personnel Schedule

Tenderers should provide the names and details of the suitably qualified Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Kev	Personn	el
-----	---------	----

Name of candidate: Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]		
Time commitment for this position:	[insert the number of days/weeks/months that has been scheduled for this position]		
Expected time schedule for this position:	Full time site presence		
Title of position: Foreman			
Name of candidate:			
Duration of appointment:	[insert the whole period (start and end dates) for which this position will be engaged]		
Time commitment for this position:	[insert the number of days/weeks/months that has been scheduled for this position]		
Expected time schedule for this position:	Full time site presence		

Date: (day month year):

Form PER -2

Resume and Declaration – Key Personnel (*Resume to be provided in this format*)

Name of Tondovou			
Name of Tandarar			

Position [1]: [tit	tle of position from Form PER-1]			
Personnel	Name:	Date of birth:		
information	Address:	E-mail:		
	Professional qualifications:	Professional qualifications:		
	Language proficiency: [language and levels of speaking, reading and writing skills]			
Details	Address of Procuring Entity:			
	Telephone:	Contact (manager/personnel officer):		
	Fax:			
	Job title:	Years with present Tendering Entity:		

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

Project		Duration of involvement	Relevant experience
[main project details	[role and responsibilities on the project]	[time in role]	[describe the experience relevant to this position]

Declaration

I, the undersigned Key Personnel, certify that to the best of my knowledge and belief, the information contained in this Form PER -2 correctly describes myself, my qualifications and my experience.

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

Commitment	Details
Commitment to duration of contract:	[insert period (start and end dates) for which this Key
	Personnel is available to work on this contract]
Time commitment:	[insert the number of days/weeks/months that this Key
	Personnel will be engaged]

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

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

Name of Key Personnel:	[insert name]	
------------------------	---------------	--

Signature:		

Date: (day month year):
Countersignature of authorized representative of the Tenderer:
Signature:
Date: (day month year):

FORM OF TENDER SECURITY - DEMAND GUARANTEE

Bene	ficiary:
Invita	ation to Tender No:
Date:	:
TEN	DER GUARANTEE No.:
Guar	antor:
will s	have been informed that(herein after called "the Applicant") has submitted or submit to the Beneficiary its Tender (hereinafter called "the Tender") for the execution of under Invitation to der No("the ITT").
	nermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender antee.
sums dema	the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or a not exceeding in total an amount of
a)	Has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Form of Tender ("the Tender Validity Period"), or any extension there to be provided by the Applicant; or
b)	Having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to be provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to Tenderers ("ITT") of the Beneficiary's Tendering document.
This	guarantee will expire:
a)	if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the performance Security and, issued to the Beneficiary in relation to such contract agreement; or
b)	if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) twenty-eight days after the end of the Tender Validity Period.
	equently, any demand for payment under this guarantee must be received by us at the office indicated above on fore that date.
[sign	ature(s)]

PART 2 – WORKS REQUIREMENTS	

SECTION VI - SPECIFICATIONS

SECTION VI-A: PERFORMANCE SPECIFICATIONS

Performance based Routine Maintenance Services

1. Introduction on Service Level Categories

Levels of Category

Based on the study of current service levels applied by the road authorities, four (4) standard service level categories Cover road network in Kenya. The principal factors considered in the selection of service levels are road type and traffic volume. However, specific road characteristics, such as climatic conditions, road function and terrain, may also be considered. Two service levels (High and Standard) are for paved roads and another two service levels (High and Standard) for un-paved roads.

The Service Levels should be selected from Table 1.1 according Annual Average Daily Traffic Volume (AADT).

Table 1.1. Service Level Categories Adopted

Road Type	Paved		Unpaved	
Service Level Category	High	Standard	High	Standard
Annual Average Daily Traffic volume	More than 20,000 Vpd	Less than 20,000 Vpd	More than 500 Vpd	Less than 500 Vpd

Note: vpd – vehicles per day

Note that Table 1.1 shows indicative traffic volume of service level category. The Road Authority need to define service level based not only on traffic but also on road class, climate and road complexity.

1.1. Service Criteria

Selection of Standard Service Level Category is made based on the road type (Paved or Unpaved), the traffic volume, as well as road conditions assessment.

The Table 1.2 below shows the list of service criteria under each Service Category and Service Scope.

Table 1.2 List of Service Criteria

Passability Poles	No obstruction of the road by street lighting poles or other electrical appliances, fallen trees or branches No missing poles
Poles	
	NT 1 1 1
	No damaged poles
Integrated Solar	Solar LED fittings
Modules	Bulbs & Fittings
	PV modules
	Charge controllers
	Batteries
н	_

	Control Pillars	All CP accessories
	Accessories	Bulbs and Fittings
X7	Vegetation Control	Pruning of Trees
Vegetation		Carting Away
Patrol	Patrol	24 hour patrol - 7 days

1.2 Description of the Road

The Road is in Machakos and Kajiado Counties. It commences at Athi River Interchange and traverses in a southward direction through Kitengela Town for 7.8 km to end at Enkare Resort.

The Road has the following major physical features.

- a) Existing 105No. 12m single arm poles
- b)Exiting 40No. 12 double arm poles
- c) Existing 166No. HPS fittings
- d)2No. tunnels with no lighting
- e) 1No. pole mounted control box
- f) Vandalized poles and pole bases

As a general reference on the Road, the information shown below is provided to the Contractor. The Employer provides this information to the best of his knowledge, but does not guarantee its correctness, and the Contractor may not make any claim based on potential errors or omissions in the information provided.

2. Works and Services to be provided

2.1 Works

The Works are what the Contract requires the Contractor to construct, install, and turnover to the Employer, as covered under Rehabilitation Works, and Improvement Works

2.1.1 Rehabilitation Works (Instructed Works)

Rehabilitation Works are a set of measurable inputs to be executed by the Contractor during the Initial Mobilization Period to allow the Road to achieve the performance standards required under the contract. Rehabilitation Works shall be carried out by the Contractor in accordance with the Bill of Quantities. Rehabilitation Works will be paid for as measured items in accordance with the unit rates in the Bill of Quantities.

The major scope of the instructed works comprises the following but not limited to;

- Provision of preliminaries and General items
- 24-hour patrol and surveillance
- Repair/Replacement of the Integrated Solar LED Modules: LED fittings, batteries, controllers, PV modules and all other accessories
- Repair/Replacement of damaged high mast fittings and tunnel fittings
- Repair/Replacement of knocked poles and arms, fittings, control pillars and high-masts complete with all the accessories

- Repair/ Replacement of vandalized poles and arms, fittings, control pillars and high-masts complete with all the accessories
- Provision of security to deter vandalism of the street lighting furniture
- Insurance follow up for compensation in case of any damage to Street lighting furniture
- Pruning of overgrown tree branches obstructing the luminaires in liaison with Machakos & Kajiado County Govts and spoiling the cuttings
- Road stakeholder engagement to ensure smooth running of the project (Kenya Police, KPLC, Public, Kajiado County Government, Machakos County Government and Area Chiefs)
- Anchoring and strengthening of (leaning) poles to upright position using approved gravel material or equivalent.
- Performance based maintenance of the street lighting to the required service level
- Any other works as may be instructed by the Engineer

The objectives of the assignment are:

- To provide sustainable street lighting to ensure a safe, secure and attractive visual environment for pedestrian and vehicular traffic, during times of inadequate natural lighting, taking into consideration economic efficiency, and appropriate technology choice
- To provide a management framework that will ensure the street lighting attain the highest standards and reliability

The detailed location of the above activities is shown in the Line Diagram which is appended in Section 8 of this document.

Repairs and maintenance works will be paid for as measured items in accordance with the unit rates in the Bill of Quantities. These works shall be instructed and done concurrently during the Maintenance Period.

2.1.2 Improvement Works

Improvement Works are a set of interventions to be executed by the Contractor to allow the Road to acquire new characteristics under the contract. Improvement Works shall be carried out by the Contractor when specifically instructed by the Engineer as set out in Clause 27 of GCC and in accordance with the Bill of Quantities. Improvement Works will be paid for as measured items in accordance with the unit rates in the Bill of Quantities.

2.1.3 Design Responsibility for Works

All Works, Rehabilitation Works, Improvement Works and Emergency Works shall be designed by the Employer in accordance with the latest specifications adopted by the Employer.

2.2 Maintenance Services

The services to be provided by the Contractor include all activities, physical and others, which the Contractor needs to carry out in order to improve, maintain and comply with the service levels as set out in Table 2.1. (Service level requirements).

The Contractor is expected to come up with a methodology of complying with the Service Levels, and other output in the performance criteria as indicated in the contract, or with any other requirements of the contract. These include management tasks and physical works associated with the road-related assets and items.

The street lighting maintenance works comprises of;

- a. Installation of Integrated Solar Modules
- b. Installation of Single Arm Poles
- c. Installation of Double Arm Poles

- d. Installation of High Masts
- e. Installation of Control Pillars
- f. Installation of High Mast Fittings and Tunnel Fittings
- g. Repair of existing poles and arms

Performance based routine maintenance services will be paid for as a fixed **lump sum per lamp per month**, with payment reductions made for non-compliance, if appropriate.

It is expected that the Contractor shall include in his rate the cost of bringing the road to required service levels as stipulated in the Contract and the same shall not be paid for separately in the bills of quantities.

For guidance, the activities to be undertaken by the Contractor include, but are not limited to, management tasks and physical works associated.

For approval by Engineer. Management tasks and physical works include, but not limited to the following;

[Note: List the management tasks and physical works that are to be provided by the Contractor under the contract. The list may include:

- 1) Maintain road usability
- 2) Maintain road user comfort
- 3) Maintain road durability
- 4) Maintain control of the Road by patrolling, data collection, conducting inspections and reporting

Maintenance Services shall be paid for as a fixed lump sum per lamp per month, with payment reductions made for non- compliance, if appropriate.

3. Compliance with Service Level Requirements

The Initial Mobilization Period for the Road to be brought to Service Level requirements is 3 months after the issuance of the Actual Start Date by the Contractor. However, the period should vary depending on the initial condition of the road as defined and specified in the SCC. In the Contract. Within the first 3 months, compliance with the Service Levels will be adjusted as shown in Table 3.1 to allow the Contractor to properly mobilize the team within the Initial Mobilization Period.

Table 3.1 Timetable for Compliance with Service Level Requirements

Contract	Road Usability	Road User	Durability
Month	(Compliance required on % of contract road)	Comfort Compliance required on % of contract road	Compliance required on % of contract road
1	50	50	50
2	100	75	75
3	100	100	100
4 until end of Contract	100	100	100

4. Programme of Performance

In accordance with clause 17.2 of the General Conditions of Contract (GCC), the Contractor shall submit a Program of Performance within not later than Fourteen (14) days after issuance of Order to Commence in the format Prescribed in the Tender Document. The program shall include, but not be limited, to the following items:

4.1 Contractor's Quality Assurance Plan

The purpose of the Contractor's Quality Assurance Plan is to integrate the requirements of the contract and the Contractor's quality assurance systems to deliver the Works and Services.

The Contractor's Quality Assurance Plan describes the methods and procedures which the Contract will apply for the execution of the Contract, including how the Contractor will:

- a) Identify the quality requirements specific to the contract,
- b) Plan and execute the Works and Services to satisfy those requirements
- c) Inspect and/or test the Works and Services to ensure compliance with the quality requirements
- d) Record and monitor the results as evidence of compliance, and
- e) Ensure that prompt action is taken to correct non-compliance.

The Contractor's Quality Assurance Plan must clearly describe the systems, procedures and methods that will be used to deliver and monitor compliance of the Works and Services.

4.2 Traffic Management Plan

If required in the Special Conditions of Contract (SCC) the Program of Performance shall include a Traffic Management Plan. The Traffic Management Plan establishes the practices for traffic management at work sites. The Traffic Management Plan must be developed by the Contractor and agreed with the Engineer.

The objectives of the Traffic Management Plan are to:

- a clearly define and document the responsibilities and chain of command for the development, implementation and management of traffic control measures and systems
- b establish the minimum requirements for temporary traffic control
- c establish the minimum geometric, cross section and surfacing standards for temporary works
- d provide appropriate transitions and enable safe and efficient traffic flow into, through and out of work sites
- e protect the Contractor's personnel at all times
- f protect the Assets and the Contractor's resources at all times.
- g Meet the operational requirements for the road

The Traffic Management Plan must include at least the following:

Lay out diagrams, method statements etc. for implementation of traffic control while undertaking each aspect of the Works and Services (including site specific layout diagrams and method statements if the Services require traffic control measures not covered by standard codes of practice)

A documented process for preparation, review and approval of the Traffic Management Plan

A document tracking and control system to ensure that only the latest operative copy of the Traffic Management Plan is in circulation

Contact details for Contractor, Principal, emergency services and other stakeholders.

4.3 Safety Management Plan

If required in the Special Conditions of Contract (SCC) the Program of Performance shall include a Safety Management Plan submitted within 14days after receipt of Order to commence. The Safety Management Plan establishes the practices for safety management at work sites. The Safety Management Plan must be developed by the Contractor and agreed with the Engineer.

The objectives of the Safety Management Plan are to:

- a clearly define and document the responsibilities and chain of command for the development, implementation and management of safety control measures and systems
- b establish the minimum requirements for the safety of workers, road users and community people using the Road
- c protect the Contractor's personnel at all times.

Contractor shall observe the following measures with a view to enhance Road Safety to the Road Users and Site Workers:

- i. Prepare and submit a comprehensive Road Safety Implementation Plan within 14 days after receipt of Order to commence for the Engineer's Approval. The plan shall include but not limited to the following:
 - Night driving
 - Safety of workers
 - Diversions
 - Traffic management Plan
- ii. The Contractor should identify, evaluate and monitor potential traffic and road safety risks to workers and road users throughout the Contract life cycle and develop measures and plans to address them.
- iii. The Contractor shall install and maintain standard approved traffic warning signs, directional signs, secure the working areas and deploy flagmen at active construction sites.
- iv. The Contractor shall assess each phase of the works, monitor incidents and accidents indicating the mitigation measures undertaken and prepare monthly reports to be submitted to the Resident Engineer.
- v. The Contractor shall factor the cost of implementation of the Road Safety Plan in the rates for the Works.

The Safety Management Plan must include at least the following:

Method statements for implementation of work safety undertaking on each aspect of the Works and Services (including safety gears for workers, use of tool box meetings for safety awareness, provision of work safety signs, training of workers on safe use of tools and equipment, safety inspection under the patrolling by Self Control Unit and commitment by the Contractor on adherence to the Occupational Safety and Health Act, 2007 amended on 2010.)

A documented process for preparation, review and approval of the Safety Management Plan

A document tracking and control system to ensure that only the latest operative copy of the Safety Management Plan is in circulation

Contact details for Contractor, Engineer, emergency services and other stakeholders.

4.4 Environmental Management Plan

If required in the Special Conditions of Contract (SCC) the Program of Performance shall include an Environmental Management Plan. The Environmental Management Plan establishes the practices for environmental management at work sites. The Environmental Management Plan must be developed by the Contractor and agreed with the Engineer.

The objectives of the Environmental Management Plan are to:

- a clearly define and document the responsibilities and chain of command for the development, implementation and management of environmental control measures and systems
- b establish the minimum requirements for environmental control measures for maintaining the adequate environment for workers, road users and community people using the Road
- c maintain the awareness of the Contractor's personnel on environmental protection at all times

The Environmental Management Plan must include at least the following:

Method statements for maintaining the adequate environmental on work sites undertaking on each aspect of the Works and Services (including specific dumping locations of debris and materials unwanted from the Road, use of tool box meetings for environmental protection awareness, training of workers on environmental control measures, inspection under the patrolling by Self Control Unit and commitment by the Contractor on adherence to the regulations and acts enacted by the government of Kenya under National Environmental Management Authority.)

A documented process for preparation, review and approval of the Environmental Management Plan

A document tracking and control system to ensure that only the latest operative copy of the Environmental Management Plan is in circulation

Contact details for Contractor, Engineer, emergency services and other stakeholders

4.5 Emergency Procedures and Contingency Plan

If required in the Special Conditions of Contract (SCC) the Program of Performance shall include an Emergency Procedures and Contingency Plan which shall establish the roles, practices and procedures during specific types of emergency events identified in the plans and contingency plans associated with the closure of roads. The Emergency Procedures and Contingency Plan must be developed by the Contractor and agreed with the Engineer and any other stakeholders the Engineer may identify.

The purpose of the Emergency Procedures and Contingency Plan is to ensure the safety of the Contractor's personnel and road users in the case of emergency and/or road closure. It should include: an effective communication and event recording system the name, contact number and specific duties of the Contractor's personnel nominated to respond to an emergency even the contact number of other parties who need to be notified in cases of emergency events, e.g. police detailed response procedures for all emergency events possible detour routes in the event of road closure

5 Timetable for Measuring Compliance with Service Level Requirements

In order to respect the Contractor's initial mobilization period, compliance with the service levels will be introduced gradually as shown in Table 2.1.

Table 2.1 Timetable for Compliance with Service Level Requirements

Contract Month	Road safety Compliance required on % of contract road	Streetlights Compliance required on % contract road
1	75	60
2	100	100
2 until end of Contract	100	100

6 Specifications for service levels for Road Safety

The road user must be able to travel at a certain level of safety, unobstructed by objects, wash-out material and other debris on the gravel wearing course and shoulders. The criteria for determining the service levels for safety are given in Table 2.2. The enforcement of these criteria is expected to be an immediate priority of the Contract due to the critical importance of road safety, and 100% compliance is expected from Month 2, as shown in the Timetable in Table 2.1. Compliance will be determined by Visual Inspection.

Table 2.2 Service Levels for Road Safety

Item	Service level	Measurement/ Detection	Time Allowed
No obstruction on the road caused by street light poles or any other electrical	o A high danger of traffic: such as fallen street light poles or any other electrical appliances	Visual Inspection	Immediately
appliances, fallen trees or branches.	and fittings, tree branches across the carriageway and is obstructing safe passage of traffic.		
	 A lesser (medium) danger to traffic: such as fallen street light poles or any other electrical appliances and fittings, tree branches within the road reserve but not on the carriageway and is not obstructing safe passage of traffic: etc: 		1 day

7 Specification for Service Levels for Street Lights

The service level criteria for maintenance of street lighting poles and all associated fittings and appliances are defined as follows:

Table 2.3: Service Levels for Street Lights

Item	Service Level	Measurement/Detection	Time allowed for repairs or Tolerance permitted
Street Lights	(i) Poles: All upright, in good condition, undamaged/without dent and free of dirt, soot and bird nests	Visual Inspection	Damaged/nonconforming poles must be attended to within 3 days. This may entail rectification or replacement.
	(ii) Integrated Solar Systems: Absence of lighting is not allowed at all	Visual Inspection	Damaged/Non-functioning integrated solar system must be attended to within 24 hours
	(iii)Control Pillar	Visual Inspection	Nonconforming,

		Damaged/vandalized or otherwise Control Pillar must be attended to within 24 hours
(iv) All other associated electrical fitting & appliances including cabling	Visual Inspection	All Nonconforming, Damaged/vandalized or otherwise electrical fittings and appliances must be attended to within 24 hours
(v) All poles must be upright and standing straight	Visual Inspection	All Nonconforming. Poles must be attended to within 3 days

8 Vegetation

This section specifies the Service Levels to be complied with in the case of trees within the central median that block lights from poles.

Vegetation is to be controlled at the locations and with the restrictions as set out in Table 2.4. Compliance will be measured with a tape measure.

Table 2.4: Vegetation Control Types

Item	Service Level	Measurement/Detection	Time allowed for repairs or
			Tolerance permitted
Vegetation	Tree branches are not	Visual Inspection	Prune tree branches within
/pruning of	to block		7 days.
trees	view/lamination from		
	the street light poles.		
	Contractor shall liaise		
	and coordinate with		
	county governments to		
	prune Tree branches		
	within the central		
	median that block the		
	view/lamination from		
	the street light poles		

9 Procedures for Inspection

The visual inspection will be undertaken as part of the Formal and Informal inspections. The criteria for Service Levels will be checked at all sections by the Engineer based on visual appearance. The Engineers shall be the sole judge of compliance. If a specified criterion is not met, the one-lamp section in which the deficit occurs will be judged non-compliant.

10 Formal Inspections

Formal inspection will be carried out jointly by the Engineer and the Road Manager at the end of each month. The main purpose of the inspections is to enable the Engineer to verify the information presented in the Contractor's Monthly Statement with the actual observed and measured conditions on the Site. The Engineer will prepare a brief Memorandum describing (i) the general circumstances of the Site visit, including date, road sections visited, persons present, etc., (ii) any non-compliance which

may have been detected, and (iii) the time granted by the Engineer to the Contractor to remedy the detected defects. Based on the outcome of the formal inspection, the Engineer will correct any possible errors or misinterpretations in the Contractor's statement, countersign it and present it to the Employer for payment, and to the Contractor for information.

Formal inspections will also be scheduled for the follow-up Site visits, whose purpose is to verify if the Contractor has remedied the causes of earlier non-compliance, within the time frame granted by the Engineer and specified in the Memorandum.

11 Payment Method (Monthly Statement)

The Monthly Statement to be submitted by the Contractor shall have format shown in Table 2.6, which gives an example of how the statement is filled out. The compliance or non-compliance is reported in the table and is used to determine the degree of compliance and the payment reduction to be made in a particular month

Contract Road:				Contract No.:				
Road Section:		From	То	Road Length:				
County:				Region:		Corridor 'A'		
Contract Month:								
Service Level	Required Complia nce		Compliance criteria	Weight	Formula for Reduction	Non-compliance		Payme nt
Criteria	T= Target	Ref.	Compliance criteria	%	Computation	Lamps	Reducti on %	Reduct ion (KSh)
1. Road Safety	100%		No obstruction of the road by street light poles or other electrical appliances, fallen trees or branches	10	R(KSh.) =	0	0.0%	-
2. Street lights	100%		Missing poles	10	W%xMxL1/L	0	0.0%	-
	100%		Solar LED Fittings	10		0	0.0%	-
	100%		Bulbs and fittings	10		0	0.0%	-
	100%		PV Modules	10	Where; W – Weight	0	0.0%	_
	100%		Charger Controllers	10	assigned to the compliance criteria	0	0.0%	_
	100%		Batteries	10		0	0.0%	-
	100%		Control Pillars	5		0	0.0%	-

	100%			Uprightness and straightness of arms and poles	5		0	0.0%	_
3. Vegetation	100%			Switchgear accessories	5	M – Monthly Maintenance Lump sum L1 – Non Conforming lamps	0	0.0%	-
	75%			Pruning of trees	2.5		0	0.0%	-
	75%			Carting away	2.5		0	0.0%	-
4. Patrol	100%			24hrs 7 days a week	10		0	0.0%	_
						L – Project Road Lamps			
						Total	l Payment I	Reduction	-
Lamps on the road for payment this month									
Total payment due this month		=	Monthly Maintenance Lump sum <i>M</i>	Payment Reduction R					
= M - R				_		-			
Less reductions for non-rectified previous non compliance		=		-	0.00				
Total payment due this month		=	_		0.00				

12 Payment Reductions and Liquidated Damaged to be applied on Non-Compliance In accordance with the relevant clauses of the Conditions of Contract, Payment Reductions are applied in case of non-compliance with Service Levels requirements, while Liquidated Damages are applied in the case of non-compliance with required Repair, Maintenance and Emergency Works.

The results of each formal inspection of the Service Levels and other performance criteria will be recorded by the Engineer in the form of a Memorandum. The memorandum will state the type and location of any non-compliance detected, in particular those non-compliances already shown in the standard tables provided by the Contractor as part of the monthly statement. For each individual case of non-compliance, the Engineer will determine a date by which the Contractor must have completed the necessary measures in order to remedy the cause of the non-compliance. A follow-up Site visit is therefore necessary at the date fixed by the Engineer, or soon thereafter, in order to verify that the Contractor has indeed remedied the cause of non-compliance.

If at the date indicated in the Memorandum, the Contractor has not remedied the cause for non-compliance, independent of the reason given for their failure to do so, the Contractor is subject to Payment Reductions in accordance with the relevant clauses of the Conditions of Contract.

Payment reductions are variable over time. If the Contractor fails to remedy a cause of non-compliance for which a payment reduction has already been applied, the amount of the payment reduction increases month by month for that particular cause of non-compliance, without a ceiling being applied, until compliance is established. The calculation of the initial (first month) amounts of payment reductions, and the formula for their adjustment over time, is to be based on the following rules given in Table 2.8

CRITERIA	CONDITIONS FOR APPLICATION OF PAYMENT REDUCTIONS	UNIT RATES FOR NON- COMPLIANCE	REFERENCE TO PERFORMANCE SPECIFICATIONS (PARAGRAPH NO.)
Road safety	Cleanliness of road free of any obstruction by fallen poles or trees: observed anywhere in a one km section that does not comply with the service levels	10% of the monthly lump-sum for one lamp applied to lamp sections which do not comply	
Street lights	Poles: all upright, in good condition, undamaged/without dent and free of dirt, soot and bird nests	75% of the monthly lump-sum for one lamp applied to lamp sections which do not comply	

	Bulbs: Absence of lighting is not allowed at all Control pillar All other associated electrical fitting & compliances including cabling		
Vegetation/ pruning of trees	Tree branches are not to block view/lamination from the street light poles. Contractor shall liaise and coordinate with county governments to prune Tree branches within the central median that block the view/lamination form the street light poles	5% of the monthly lump-sum for one lamp applied to lamp sections which do not comply	
Patrol	Provision of Daily Patrol Records, Daily Reports and Incident Reports within 24 hours.	10% of the monthly lump-sum for one lamp applied to days which do not comply	

13 Informal Inspections of Service Levels

The Engineer may carry out informal inspections of Service Levels as part of his general mandate given to him by the Employer. He may do so on his own initiative, at anytime and anywhere on the roads included in the Contract. If he detects any road sections where the Service Levels criteria are not met, he is obliged to inform the Contractor within 24 hours in writing, in order to enable the Contractor to take remedial action as soon as possible. The results of informal inspections may not be used by the Engineer for purposes of correcting the Contractor's monthly statements or applying penalties, except for cases in which the traffic flow on the road has been completely interrupted.

14 Self-Control Unit (SCU)

The Contractor is required to establish a Self-Control Unit within his project organization throughout execution and completion of the Works and Services to the satisfaction of the Engineer. The roles of the SCU:

1. For conducting self-inspection to verify the degree of compliance with the Road Performance Standards as defined by the Service Levels and maintain the reporting system of self-inspection.

- 2. Assessment of the Road. The Self-Control Unit shall have a complete knowledge of the road condition, both on and off carriage way, at all times by carrying out patrolling, to the satisfaction of the Engineer.
- 3. The Self-Control Unit is responsible for Gathering information required by the Contractor to prepare the Monthly Statement.
- 4. The carrying out, in close cooperation with the Engineer, the Form a land Informal Inspections of Service Levels which will take place as required.

The Contractor is required to assign a technically qualified and trained person, or persons, to continuously verify the degree of compliance of Service Levels. The Contractor is also required to arrange a satisfactory means of mobility for conducting patrolling to the satisfaction of the Engineer.

15 Site Inspection and Patrolling/Reporting

The Contractor is required to undertake the following management tasks to ensure the full integrity of the Road throughout execution and performance of the Works and Maintenance Services.

15.1 Site Condition Assessment before Commencement of Works and Services

The Contractor shall conduct initial site condition assessment before commencement of the Works and Services under the contract. In case any defects and deficiencies are discovered under the assessment, the Contractor shall notify the Engineer by submitting the Defect Detection and Rectification List as attached to the Appendix 1 of the Performance Specifications and upon agreement of the Engineer, the Contractor shall carry out rectification works as the Rehabilitation Works.

In case the Contractor discovers cases of illegal encroachment and illegal dumping of unwanted materials or otherwise illegal actions by the third parties, the Contractor shall notify the Engineer for further instructions as required.

15.2 Determination of Subsection and Installation of Marker Posts

The Contractor shall either mark clearly on the road or install temporary posts to determine the subsections inspection purposes. The Contractor shall submit the record of such identification and markers to the Engineer.

15.3 Patrolling/Reporting

The Contractor shall carry out patrolling of the Road as required under the contract. Such patrolling shall be reported to the Engineer without delay through submission of the Daily Work Record, Daily Patrol Record, Monthly Photo Record and Incident Report as attached to the Appendices 2, 3, 4 and 5 of the Performance Specifications submitted within 24 hours. The contractor is also required to give the result of self-inspection Engineer without delay through submission of the Detail Self Inspection Result Record Form (Paved Road) as attached to the Appendix 6 of the Performance Specifications.

In case the Contractor discovers cases of illegal encroachment and dumping of unwanted materials or illegal actions by third parties, the Contractor shall notify the Engineer for further instructions as required.

15.4 Ad hoc Inspection

The Engineer may carry out ad-hoc inspections to verify the degree of compliance with the Road Performance Standards as defined by the Service Levels. He may do so on his own initiative, at anytime and anywhere on the roads under the contract. If he detects any road sections where the Service Level criteria are not met, he is required to notify the Contractor within 24 hours in writing as the Corrective Order, to enable the Contractor to take remedial action as soon as possible. The results of ad-hoc inspections may not be used by the Engineer for purposes of correcting the Contractor's monthly statements or applying penalties, except for cases in which the traffic flow on the road has been completely interrupted due to the negligence and tardy action by the Contractor.

16 Monthly Statement

16.1 Preparation for Monthly Statement

For the Maintenance Services. The Contractor shall take the following actions;

- Prior to compilation of the Monthly Statement for each month, the Contractor is required to prepare the Payment Reduction Calculation Table for the month by utilizing the result of the most recent self- inspection recorded in Self Inspection Result Record Form to determine the total length of non-compliant sections for each Service Scope and for calculation of the reductions required for the month by determining the percentages of non-compliant sections for each Service Scope. The formats of Payment Reduction Calculation Table are attached as Appendix 8.
- 2) The prepared Payment Reduction Calculation Table shall become the basis of the payment request for the Maintenance Services.
- 3) Upon completion of Formal Inspection, the amounts indicated on the Monthly Statement and the Payment Reduction Calculation Table will be adjusted, if required. Such modified Monthly Statement and Payment Reduction Calculation Table shall be countersigned by the Engineer to sign it and present it to the Employer for payment, and to the Contractor for information.

16.2 Reduction Weighting for Non-Compliance on Maintenance Services

In accordance with the relevant clauses of the Performance Specifications and GCC, payment reduction is applied in case of non-compliance with Service Levels.

In accordance with the relevant clauses of the Conditions of Contract, Payment Reductions are applied in case of non-compliance with Service Level requirements, while Liquidated Damages are applied in the case of non-compliance with required Repair, Maintenance and Emergency Works.

The results of each formal inspection of the Service Levels and other performance criteria will be recorded by the Engineer in the form of a Memorandum. The Memorandum will state the type and location of any non-compliance detected, in particular those non-compliances already shown in the standard tables provided by the Contractor as part of the monthly statement. For each individual case of non-compliance, the Engineer will determine a date by which the Contractor must have completed the necessary measures in order to remedy the cause of the non-compliance. A follow-up site visit is therefore necessary at the date fixed by the Engineer, or soon thereafter, in order to verify that the Contractor has indeed remedied the cause of non-compliance.

If at the date indicated in the Memorandum, the Contractor has not remedied the cause for non-compliance, independent of the reason given for their failure to do so, the Contractor is subject to Payment Reductions in accordance with the relevant clauses of the Conditions of Contract.

Payment Reductions are variable over time. If the Contractor fails to remedy a cause of non-compliance for which a payment reduction has already been applied, the amount of the payment reduction increases month by month for that particular cause of non-compliance, without a ceiling being applied, until compliance is established.

The calculation of the initial (first month) amounts of payment reductions, and the formula for their adjustment over time, is to be based on the following rules given in Table 2.8.

NOTE:

- 1. Payment reduction is a % of the monthly lump sum for one km applied to each one-km section which does not comply.
- 2. Penalties can also be applied based on non-compliance as spelt out in the *PBC* Guidelines Developed by the Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works (MoTIHUD & PW) Edition 1.1 of February 2016.

Note: (i) The Unit Rates of payment reductions ("PR_u) shown in the above table are applicable during the first 30 days of non-compliance.

(ii) If the non-compliance has not been remedied within thirty days, liquidated damages for periods beyond 30 days are calculated based on the following formula:

$$PR = 2^n PR_p$$
 considering:

PR = New noncompliance rate to be applied

J = number of days of non-compliance

$$n = \begin{cases} \frac{J-1}{30} \end{cases}$$
 rounded up to full number (without decimals)

PRp = Percentage of rate of non-compliance of the previous month i.e.

Month
$$1 = \mathbf{PRu}$$

Month $2 = 2^{n}(\mathbf{PRu})$
Month $3 = 2^{n}\{\mathbf{2^{n}(PRu)}\}$
Month $3 = 2^{n}\{\mathbf{2^{n}(PRu)}\}$

- (iii) Payment reductions and Liquidated damages will be charged as penalties and are non-recoverable in subsequent monthly payment certificates.
- (iv) Failure to comply with the required service levels for a sequential/continuous period of **three** (3) months will lead to termination of the Contract by the Employer as stipulated in clause 63.1 (d) of the Condition of Contract. This failure should not exceed 30% of the overall monthly PBC amount per month.

A notice shall be served by the Engineer when the 30% reduction on the monthly payment of PBC is noted.

Determination of Liquidated Damages

For **instructed Works**, the liquidated damages are **0.1% of the contract per day upto a limit of 5% of the Contract price.**

17 Formal Inspection

The Formal Inspection shall be carried out jointly by the Engineer and the Road Manager at the end of each month. The Engineer shall notify the Contractor that he intends to carry out Formal Inspection in writing within 7 days of notification. The Contractor shall inform the Engineer of the proposed date and time and shall prepare for Formal Inspection. The main purpose of carrying out the Formal Inspection is to enable the Engineer to verify the information presented in the Contractor's Monthly Statement with the actual observed and measured conditions on the site.

17.1 Procedure for Formal Inspection

The Contractor shall submit the following documents as indicated in Table 10.1 to the Engineer for scrutiny prior to the Formal Inspection after the receipt of notification of carrying out Formal Inspection. The Contractor shall provide sufficient time to the Engineer to allow full scrutiny of the submitted documents.

Table 10.1 List of Documents for Formal Inspection

Appendices	Names of Documents	Mandatory Submission	Submission, if requested by the Engineer
1	Defect Detection and Rectification Lists		
2	Daily Work Records		
3	Daily Patrol Records		
4	Monthly Photo Records		
5	Incident Condition & Activity Reports		
6	Detail Self – Inspection Result Record Form		
7	Payment Reduction Calculation Table		

The criteria of each Service Level shall be checked jointly by the Engineer and the Road Manager at sections selected by the Engineer based on visual appearance. The Engineer shall be the sole judge of compliance. If a specified criterion is not met, the one-kilometer section in which the deficit occurs will be judged non-compliant in accordance with the Self Inspection Result Record Form.

The Engineer shall prepare a brief Memorandum describing

- i) The general circumstances of the site visit, including date, road sections visited, persons present, etc.,
- ii) Any non-compliance which may have been detected, and
- iii) The time granted by the Engineer to the Contractor to remedy the detected defects.

The results of Formal Inspection on Service Levels will be recorded by the Engineer in this Memorandum. The Memorandum will state the type and location of any non-compliance detected, in particular those non- compliances already shown in the most recent Self Inspection Result Record Form provided by the Contractor as part of the Monthly Statement. For each individual case of non-compliance, the Engineer will determine a date by which the Contractor must have completed the necessary measures in order to remedy the cause of the non- compliance. A follow-up site visit is therefore necessary at the date fixed by the Engineer, or soon thereafter, in order to verify that the Contractor has indeed remedied the cause of non-compliance. If at the date indicated in the Memorandum, the Contractor has not remedied the cause for non-compliance, independent of the reason given for their failure to do so, the Contractor is subject to payment reduction in accordance with the relevant clauses of the Performance Specifications and GCC.

Based on the outcome of the Formal Inspection and subsequent remedies by the Contractor or otherwise, the Engineer will correct any possible errors or misrepresentations in the Contractor's Monthly Statement, countersign it and present it to the Employer for payment, and to the Contractor for information.

18 Performance Monitoring by the Employer

The Contractor shall acknowledge that the Employer encourages adoption of proactive approach by the Contractor on performing the Maintenance Services. To maintain such approach, the Employer shall have the power to entrust the Engineer to conduct monthly performance monitoring on the Contractor.

The Contractor, shall within seven (7) days of commencement, prepare and submit for the Engineer's approval the forms listed herein and any other that will be required for monitoring, recording and checking the compliance of service levels during the implementation of Contract.

These forms are:

- ✓ Daily Work Record Form
- ✓ Daily Patrol Record Form
- ✔ Photo Record Form
- ✓ Incident Report Form
- ✓ Defect Detection and Rectification List
- ✓ Detail Self-Inspection Result Report

- **✓** Form (Street Lighting)
- ✓ Detail Self-Inspection Result Report
- **✓** Summary Self-Inspection Report Form
- **✓** (Street Lighting)
- **✓** Payment Reduction Calculation Table
- **✓** (Street Lighting)
- **✓** Summary of Statement for Payment
- ✓ Account (Monthly Statement)
- Performance monitoring will be conducted on service level compliance, selfcontrol unit performance, work safety performance, performance on environment and social management, corrective order management and statutory compliance. The format of Monthly Evaluation Form is attached as Appendix 9, for the purpose of performance monitoring.
- 2) The result of performance monitoring of each month will be used for the evaluation of the Contract or at the end of each year. Evaluation of the Contractor shall be carried out by the Engineer using the Contract Evaluation Tally Sheet, which is attached as Appendix 10.
 - The total aggregate weighting of 100% is applied to 6 criteria in 1) above, with the weighting of 50% on service level compliance, 20% on work safety performance, 0% on statutory compliance and the remaining criteria each weighing 10%.
- 3) The result of each month on each criterion will be evaluated either a pass or a fail. The tally will be made at the end of each month, collected to the end of the year and to arrive at the performance of the criterion as the percentage of pass attained during the year. The respective weight will be applied to arrive at the evaluation score, with the maximum score of 100 and the minimum score of 0. For statutory compliance, the evaluation score will not be tabulated, but a penalty of 20 will be imposed in case the Contractor faces violation on statutory compliance at least once in a year.
- 4) Performance monitoring will be conducted on service level compliance, self-control unit performance, work safety performance, performance on environment and social management, corrective order management and statutory compliance. The format of Monthly Evaluation Form is attached as Appendix 9, for the purpose of performance monitoring.
- 5) The result of performance monitoring of each month will be used for the evaluation of the Contract or at the end of each year. Evaluation of the Contractor shall be carried out by the Engineer using the Contract Evaluation Tally Sheet, which is attached as Appendix 10.
 - The total aggregate weighting of 100% is applied to 6 criteria in 1) above, with the weighting of 50% on service level compliance, 20% on work safety performance, 0% on statutory compliance and the remaining criteria each weighing 10%.
- 6) The result of each month on each criterion will be evaluated either a pass or a fail. The tally will be made at the end of each month, collected to the end of the year and to arrive at the performance of the criterion as the percentage of pass attained during the year. The respective weight will be applied to arrive

at the evaluation score, with the maximum score of 100 and the minimum score of 0. For statutory compliance, the evaluation score will not be tabulated, but a penalty of 20 will be imposed in case the Contractor faces violation on statutory compliance at least once in a year.

19 Handover Report

Immediately prior to the completion of the contract, the Contractor shall prepare a Handover Report and submit to the employer. The purpose of the Handover Report is to provide a smooth transition to the next contract and ensure that the next contractor is aware of any outstanding issues. The Report will:

- a) Summarize any unresolved issues;
- b) Include the most recent complete set of data on the roads covered by the contract, and
- c) Provide the following details as shall be agreed by the Engineer:
 - i) A schedule of outstanding defects.
 - ii) Any unresolved issues, especially those that may impact on the next Contractor.
 - iii) Details of any sensitive issues.
 - iv) Any on-going special monitoring/maintenance needs

SECTION VI-B: SPECIFICATIONS ON INSTRUCTED WORKS

The following specifications shall be used in the Tender

- 1. British Standard and British Standard European Specifications.
 - Code of Practice for the Design of Road Lighting BS 5489 :2003
 - Road Lighting (Performance Requirements) BS EN 13201–2:2003
 - Requirements for Electrical Installations BS 7671
- 2. The Standard Road Maintenance Manual
- 3. The Special Specifications Detailed hereunder

101 SPECIAL SPECIFICATIONS

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

102 LOCATION OF CONTRACT

The project is part of Corridor A and is located in Machakos and Kajiado Counties. The project road commences at Athi River Interchange and runs in a Southward direction through Kitengela Town. The project terminates at Km 7+800, Enkare.

The project road is a 7.8 km single carriageway with approximately 4.6 km in Machakos County and 3.2 km in Kajiado County. The road includes service roads in Kitengela Town, Kajiado County along the project alignment.

103 EXTENT OF CONTRACT

Performance Based Routine Maintenance Services

The services to be provided by the Contractor include all activities, physical and others, which the Contractor needs to carry out in order to comply with the Service Levels and other output and performance criteria indicated in the Contract, or with any other requirements of the Contract. In particular, they include management tasks and physical works associated with the following road-related assets and items:

- Provision of preliminaries and General items
- 24-hour patrol and surveillance
- Repair/Replacement of solar fittings, batteries, charge controllers, solar PV modules and all solar accessories
- Repair/Replacement of damaged high mast fittings and tunnel fittings
- Repair/Replacement of knocked poles and arms, fittings, control pillars and high-masts complete with all the accessories
- Repair/ Replacement of vandalized poles and arms, fittings, control pillars and high-masts complete with all the accessories
- Provision of security to deter vandalism of the street lighting furniture
- Insurance follow up for compensation in case of any damage to Street lighting furniture
- Pruning of overgrown tree branches obstructing the luminaires in liaison with Machakos & Kajiado County Governments and spoiling the cuttings
- Road stakeholder engagement to ensure smooth running of the project (Kenya Police, KPLC, Public, Kajiado County Government, Machakos County Government and Area Chiefs)
- Anchoring and strengthening of (leaning) poles to upright position using approved gravel material or equivalent.
- Any other works as may be instructed by the Engineer.

Performance based routine maintenance service will be paid for as a fixed lump-sum per km per month, with payment reductions made for non-compliance, if appropriate.

Rehabilitation and improvement works

Improvement, Repairs and Maintenance works will be carried out by the Contractor when specifically instructed by the Engineer. Activities include:

- Installation of new single and double arm poles with solar LED fittings, rechargeable batteries, charge controllers, PV modules and all other accessories
- Installation of new tunnel lighting fittings with all accessories
- Installation of high masts with LED fittings and all accessories
- Installation of control pillars with all accessories
- Removal and transport of existing street lighting furniture on the project road and transport to KeNHA yard
- Repair and replacement of knocked/damaged or vandalized streetlight poles, control
 pillars, high masts and associated accessories at the beginning of Contract. This will
 only be limited to those facilities that are evaluated to be non-functional before
 possession of Site by the Contractor. Thereafter, the Contractor shall be responsible for
 uninterrupted functioning of all streetlights including repair of all damages resulting for
 whatsoever cause.
- Pruning of overgrown vegetation that obscure lighting at the beginning of the Contract. Thereafter, the Contractor shall be responsible in ensuring that tree branches blocking the lighting are pruned by liaising with County Government and relevant authorities.

Improvement, repair and maintenance works will be paid for as measured items in accordance with the unit rates in the Bill of Quantities.

The objectives of the assignment are:

- To provide sustainable street lighting to ensure a safe, secure and attractive visual environment for pedestrian and vehicular traffic, during times of inadequate natural lighting, taking into consideration economic efficiency, and appropriate technology choice.
- To provide a management framework that will ensure the street lighting attain the highest standards and reliability.
- Pay for operational expenses such as electricity bills, etc.;

In carrying their work, the Bidder shall co-operate fully with the concerned agencies of the Government of Kenya, in particular the Maintenance Department and Planning & Environment Department, Kenya National Highways Authority, Machakos County Government, Kajiado County Government, Provincial Administration, amongst others. The Bidder shall provide the necessary support services related to and necessary for the successful implementation of the assignment. The work shall cover but not be limited to the aspects outlined in these Terms of Reference

Description

The street lighting furniture includes all the street lighting facilities along the project road. These are:

- 1. 12 m double arm galvanized poles including arms
- 2. 12 m galvanized single arm poles including arms
- 3 Integrated Solar Modules and all accessories
- 4. 35m high masts and all its accessories

- 5. All light fixtures and fittings on meter poles and high masts
- 6. All tunnel fittings
- 7. All control pillars and its accessories
- 8. All cables and accessories

The assignment has two major components:

- 1. Street lighting
- 2. Safety control

The works shall include maintenance of current and new installations of street lighting

(i) Maintenance Personnel

All personnel undertaking street lighting maintenance activities shall have the appropriate qualifications, training, experience and registration with relevant professional bodies necessary to undertake their designated activities in a professional and safe manner. These shall include working in a high speed road environment and formal electrical qualifications. Appropriate training of personnel is the responsibility of the Contractor. KeNHA will undertake random audits to ensure compliance.

(ii) Maintenance Plant and Equipment

Due to the height of road lighting installations, Elevated Work Platform (EWP) vehicles shall be used. Every operator shall possess a valid relevant driver's license and shall have an appropriate level of experience in EWP operation and shall be trained in safe work procedures.

iii) Replacement Parts

All replacement parts shall comply with existing installations unless the contractor at his own cost is willing to provide a substitute with similar or superior performance with the approval of KeNHA. The photometrics and electrical characteristics of replacement luminaries shall be such that the lighting and electrical integrity of the installations are not compromised. Where identical luminaries are not available, design verification for compliance with the standards shall be carried out by an appropriately qualified and experienced electrician.

iv) Traffic Management

Safety and traffic control plans shall be approved by KeNHA before maintenance work is conducted.

All signage used during road lighting maintenance shall be in accordance with the relevant standards. Where road lighting is expected to be non-operational for more than 2 days from when the fault is identified, the temporary sign "STREET LIGHTING UNDER REPAIR" shall be displayed.

v) Reporting requirements

The progress of any maintenance regime being undertaken shall be continually tracked and reported. Periodic maintenance meeting shall be schedule between the Contractor and KeNHA

The meeting shall cover as a minimum the following items: -

- Review of performance of the road lighting installation

- Review of performance of the Management Contractor
- Reporting of current progress against expected for example staffing levels/changes budgeting/expenditure and
- Discussion of issues/problems and how they are being addressed.

vi) Record Keeping

All road lighting maintenance activities shall be logged in order to monitors road lighting performance and to trend failure and outage rates.

Minimum details required to be logged and reported include:-

- Item management integrated module, pole, pit, switchboard, lamp, luminaire, reopenable junction box etc.
- Identification number
- Date installed
- Date maintained
- Type of maintenance service damage/fault, bulk, lamp replacement, routine spot etc.
- Name of maintenance service provide (Contractor company name and maintenance personnel)
- Name of Road/Section and
- Lamp replacement date
- vii) Scheduled Maintenance

1. Electrical

Periodic inspections and tests are required on the electrical installation ensure compliance with the standards. Full inspections and tests shall be carried out at a maximum of 2 weeks intervals. Where the risk of degradation of the installation due to environmental or other factors is considered high, more frequent inspections shall be carried out. Spot check audits on parts of high risk installations shall be carried out at a maximum of 3 months intervals. Typical high risk factors may include corrosive environments, susceptibility to flood/submergence, devices nearing end of life, vermin habitats and high pedestrian activity.

Immediate electrical risks (including exposed live conductors, unearthed equipment and incorrect polarity) must be made safe and rectified when discovered and KeNHA should be notified of the same.

Control Pillar maintenance

Maintenance shall be carried out to ensure the electrical integrity of the switchboard. As the switchboard is the point is the point where lighting circuits originate and are controlled it is important that all the components are in good condition.

Inspection shall include but not necessarily be limited to:-

- Ingress of water and vermin
- Deterioration of weatherproof seals and other components
- Cracking and deterioration of the concrete cover case
- Damage by rodents
- Detection of poor connections and joints
- Correct earthing
- Protection against direct and indirect contact with LV terminals/surfaces
- Correct internal labeling of components

Electrical test shall be carried out and documented in accordance with the existing standards.

Cable and Connection Maintenance

Electrical cabling and connections shall be maintained to ensure a low impedance path for the electricity supply. While road lighting cable is expected to last in excess of 25 years under standard operating conditions, a number of factors (such as those previously mentioned) can reduce service life. Consequently, scheduled visual observations and electrical tests are required.

Where cable temperatures are significantly raised due to poor electrical connections, insulation damage can occur, which may ultimately result in fire. Clean cable termination surfaces, correct fixing tightness and the application of protecting grease to terminations can assist in maintaining the integrity. Thermal imaging can be used where practical and cost effective to aid early detection of high resistance joints.

Where water proof cable termination are not properly installed and maintained, water ingress can be a problem subsequent degradation of the cable. Within the cable termination enclosure, the sheath shall be carefully pealed back clear of the insulation and the bottom of the enclosure filled with a proprietary sealant to fill the area around the cable and the enclosure. The sea land shall encase the insulation/sheath interface so that any moisture tracking between the insulation and sheath cannot enter the enclosure. Proper closure of the enclosure and maintenance of seals will assist in maintaining a waterproof termination. Poorly fitting enclosures shall be replaced at the cost of the contractor.

Rodents and vermin attack as well as poor installation methods can also affect the integrity of the cable sheath. Where damage has occurred, moisture ingress and degradation will occur.

Where the rate insulation resistance degradation reasonably suggest that the cable insulation will not comply at the next periodic inspection interval, inspection frequency shall be increased or rectification undertaken.

Inspection items shall include, but not limited to:-

- Joints, connections and terminations for corrosion.
- Poor, loose, overheated or unsecured connections
- Damaged insulation
- Exposed conductors
- General condition of cable
- Evidence of rodent/vermin activity

Pits and conduit maintenance

Pits and conduits shall be inspected visually. Once it has been determined that the conduits installation complies with the required depth, this need no longer be checked except where work to the ground surface has been carried out in the vicinity of the conduit.

Pit lids shall be intact, undamaged and properly fitted to the pit. Pit shall be free of damage, with no collapse of ground around the pit, no collapse of the inside of the pit, and with the pit top level with the surrounding surface. Pit shall be free draining.

Maintenance of pits and conduits shall include but not limited to:-

- Ensuring adequate drainage
- Replacement of broken or chipped pit lids
- Rectifying collapsed pit side walls and other damage
- Maintaining ground/pit surface level and pit surrounds

2. Lighting

Periodic inspections of the lighting installation shall be undertaken to ensure the lighting is operating as designed. Bulk lamp changes if necessary and luminaire cleaning shall be carried out regularly during the contract period. Where the risk of degradation of the installation due to storms, environmental or other factors is considered high, more frequent inspections/maintenance shall be carried out. After bulk lamp replacement has been initiated, spot lamp replacement inspection shall be carried out more frequently if warranted by the number of failures reported. The rate of lamp mortality is not linear over time.

Luminaire Maintenance

Maintenance of luminaries shall include but not be limited to:-

- Cleaning of all optical surfaces of the luminaire, both internal and external.
- Checking of gaskets for deterioration and replacement where necessary.
- Replacement of damaged/weathered diffuser
- A visual check of the electrical components and wiring for signs of overheating

- Checking of all accessible screws, nuts and fixings for tightness
- Realigning of the luminaire as per designs specification as required.

Optical levels are designed to comply with the relevant standards at the time of installation. Sight lighting measurements are not required where an appropriate maintenance programme is followed. Hence it is important that light output be maintained throughout the life of the road lighting in accordance with the standards.

Where luminaires are installed in high pollution areas, more frequent cleaning may be required.

Bulk Lamp Replacement (BLR)

Bulk lamp replacement shall be carried out at least once every three years. BLR is where all lamps are replaced at one time irrespective of their operational status. The contractor is required to ascertain the possibility of carrying this exercise during the condition survey and he should factor this in his bid.

As there may be a significant number of lamps to be replaced in, BLR may be carried out over a three year period where for example, a third of the lamps are replaced each year.

Spot Lamp Replacement

In addition to the programmed BLR, periodic lamp inspection patrols must be undertaken to detect spot lamp outages does not exceed 5% of the total lamp population.

Luminaire replacement

Luminaires shall be replaced at end of life (nominal life 20 years). Where possible, an equivalent type shall be used to maintain integrity of the lighting design. In the event the Contractor wishes to replace the luminaires in order to save on his operating costs, then this cost should be borne by the Contractor in consultation with the client.

Replacement of luminaires with a different type may impact on the lighting performance, prior to replacement, compliance with current lighting standards shall be verified. Where performance will not meet required standards, the installation shall be upgraded.

3. Structural

Periodic visual inspections shall be undertaken to ensure at least the following items are examined for compliance with the relevant standards.

- Steel poles
- Other luminaire supports (for example, under overpasses)

Steel pole Maintenance

Generally, once steel poles have been installed and commissioned, minimal maintenance is required. However, the following aspect shall be inspected as a minimum:

- Testing the thickness of galvanic protection at the pole base and other areas
- Pole vertical alignment tolerance check
- Surrounding area assessment

Road lighting poles can suffer damage from both major and minor incidents. They shall be replaced at the cost of the Contractor when any of the following damage is evident.

- Horizontal cut(s) or tear(s) exist and exceeds 20% of the pole circumference, or
- Deformation of pole due to impact exceeds 20% of the pole diameter, or
- Hatchway door cannot be securely fastened or is damaged to the extent it cannot be replaced or repaired, (even if the pole is not damaged).

Where sharp edges are present, but it is not considered necessary to replace the pole, the edges shall be rectified to remove the risk of personal injury. Where hatchway doors and/or fixing are damaged and can be replaced without the need for replacing the pole, the damaged part(s) shall be replaced.

Welding on poles shall only be undertaken at the initial pole fabrication stage. No additional welding of poles shall be undertaken.

Environmental

Vegetation Management

The growth of vegetarian near luminaries has the potential to significantly reduce the effectiveness of road lighting installations. Where vegetation or other obstructions have or may have an impact on road lighting performance, they shall be removed or otherwise treated to remove the risk at the cost of the Contractor in consultation with relevant authorities.

Vegetation may also reduce security, increase the likelihood of vermin and/or hinder access to switchgear and electrical pits and shall be managed accordingly. Concrete surrounds should be installed around equipment, particularly switchboards.

Vermin

Evidence of vermin infestation shall be removed, and damage caused by vermin shall be rectified. The installation shall be treated/modified to prevent/minimize the likelihood of reinfestation.

Maintenance access

Where necessary, access to sites shall be remedied to allow safe, all weather access by maintenance personnel.

General tidy up around streetlight poles

Each site shall be cleaned of all waste/rubbish so as to present a clean, tidy area that reflects well maintained Roads.

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 co-ordinated 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.

105 ORDER OF EXECUTION OF WORKS

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

107 TAKING OVER CERTIFICATE

The minimum length of the road for which a certificate will be issued under clause 48 of the conditions of Contract shall be a whole length of the road substantially completed.

109 NOTICE OF OPERATIONS

(a) 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

- (b) 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.
- (c) No explosives of any kind shall be used without prior written consent of the Engineer.

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.

120 PROTECTION OF EXISTING WORKS AND SERVICES

The Contractor shall acquaint himself with the position of all existing services such as sewers, water drains, cables for electricity and telephone, lighting and telephone poles, water mains, etc., before commencing any excavation or other work likely to affect the existing services.

The cost of all plant, equipment and materials, labour, technical and professional staff, transport and the like necessary for determining the locations of existing services, including the making good of any damage caused to such services all to the satisfaction of the Engineer, shall be deemed to be included in the tender rates. No other payment shall be made for the costs of such operations, nor for the making good of damage caused thereby to the existing services.

The Contractor shall be held responsible for injury to existing structures, works or services and shall indemnify and keep indemnified the Employer against any claims in this respect (including consequential damages).

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 therefrom. 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.

128 STORAGE OF MATERIALS

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

129 TEST CERTIFICATES

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

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

131 SIGNBOARDS

The Contractor shall provide and erect two (2) publicity signs on the site as directed. The Engineer shall, as shown in the Drawings, direct the minimum dimensions and thickness of the steel framework and sheet. The framework and sheet shall be prepared and painted black, while the ring at the top of the supporting frames shall be painted white. The wordings and KeNHA's logo shall be printed on backlit sticker paper resistant to the effects of weather using

reflectorized paint or material approved by the Engineer. The colours, fonts and heights of the letters shall be as indicated on the attached drawings and as directed by the Engineer.

Payment for the Publicity signboards shall be made in instalments in accordance with the following conditions: -

- a) 50% when the signboards are accepted by the Engineer fully installed
- b) 30% in equal monthly instalments form the date Engineer accepts the signboards fully installed over the remainder of the Contract period. This payment shall be deemed to cover the securing and maintenance of the signboards and the Engineer may withhold or reduce payment if the contractor fails in these obligations
- c) 20% when the signboards have been removed and the site cleared at the end of contract period or earlier if the Engineer has no further use of the signboards
- d) Each instalment will be subject to the deduction of retention money

The Signboards shall revert to the Contractor after issuance of the Defects Liability Certificate

Resident Engineer's Laboratory Furniture and Equipment

As listed in Appendix to Item 01-80-032 and 01-80-033 of the bills of quantities.

132.1 ENGINEER'S REPRESENTATIVE OFFICE

The Contractor may be instructed by the Engineer under clause 58 of the General Conditions of Contract to make payments of general receipted accounts for such items as stationery, stores, furniture and equipment, claims and allowances for supervision personnel and any miscellaneous claims or the Engineer may direct the Contractor to purchase or pay for the above. The Contractor will, on provision of receipts, be paid under appropriate bill items in the BoQ.

The Contractor, when instructed, shall provide and install at the Engineer's office the Equipment specified in Appendix B with a dealer's certificate and warranty:

15. Three years' warranty

132.3 COMMUNICATION FOR THE ENGINEEER

Internet and e-mail services

Where directed, the contractor shall provide 24 hours terrestrial or wireless internet connectivity with minimum throughput speed of 128kilobytes per second for the exclusive use by the Engineer, including all accessories and Terminal Equipment and pay for all associated installation, maintenance and usage charges throughout the duration of the contract.

The contractor shall allow for the provision and maintenance of internet connectivity and associated costs as per Appendix to item 01-80-026 of the Bills of Quantities.

137 ATTENDANCE UPON THE ENGINEER AND HIS STAFF

The costs, for attendance required by this Clause 137, shall be as specified in the attached table:

<u>Designation</u>	<u>Number</u>
Resident Engineer	<u>1</u>
Asst. Resident Engineer	<u>1</u>
Engineer (Electrical)	1
Assistant Engineer (Electrical)	1
Inspector (Project)	<u>1</u>
Driver	1
Office Assistant	<u>1</u>
Intern	1
Attachés	1

and shall be paid for under Item 01-80-030A of the Bill of Quantities.

In addition to the above listed staff, the Employer will attach under training or internship/Industrial attachment additional number of technical staff comprising Engineers, Inspectors, Surveyors and Materials Technologists. These staff shall be paid a stipend as shall be directed by the Engineer and the Contractor shall be reimbursed under Item 01-80-030A of the Bill of Quantities.

Payment of the RE's staff wages shall be made at the end of every month, when instructed. Failure to pay the wages within the stipulated time shall attract penalties as stipulated in the appendix to form of tender.

138 VEHICLES AND DRIVERS FOR THE ENGINEER AND HIS STAFF AND METHOD OF PAYMENT

In addition to provisions of the Clause 138 of the Standard Specification, the Contractor shall when instruct to do so provide, fuel and maintain in good working conditions, the number and type of vehicle specified in the **Bill of Quantities** for exclusive use of the Engineer and his staff throughout the Contract. Used vehicles shall not be accepted.

The Contractor shall ensure the provided vehicles are comprehensively insured throughout the contract period

The Contractor shall provide fuel card for each vehicle, and the fuel card shall be loaded, on a monthly basis, with cash equivalent to the cost of fuel to cover 4000km

Should any vehicle supplied not be in road worthy condition, the Contractor shall provide 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 shall be by months. Payment for mileage above 4,000Km shall be made at a rate per kilometer. The payment shall be inclusive of all fuels, lubricants, servicing, insurance, maintenance and repairs. Payment shall be made under relevant items in Bills of Quantities No. 1.

139 MISCELLANEOUS 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.

140 PAYMENT OF OVERTIME FOR ENGINEER'S JUNIOR STAFF

If the Contractor wishes to execute permanent work outside the Engineer's normal working hours, as stated in Clause 108 of this Specification, then the payment for the overtime for Engineer's support staff shall be paid by the Contractor, at the latest Ministry of Labour rate.

142 ENVIRONMENTAL PROTECTION (where applicable)

The Contractor shall comply with the Statutory Regulations in force in Kenya regarding environmental protection and waste disposal, and shall liaise with the National Environmental Management Agency (NEMA).

Within four (4) weeks of the order to commence work, the Contractor shall prepare and submit a specific Environmental Management Plan for the project and his operations, relating to the approved Environmental Impact Assessment. The Environmental Management Plan shall outline potential environmental hazards and risks, and provide an action plan to deal with the hazards, minimize the risks, and mitigate adverse environmental impacts, and include a general decommissioning plan covering all relevant aspects of the project. The Environmental Management Plan shall identify monitoring indicators and reporting requirements.

The Contractor shall be required to submit environmental progress reports to the Engineer every three (3) months.

The Contractor shall ensure so far as is reasonably practicable and to the satisfaction of the Engineer; that the impact of the construction on the environment shall be kept to a minimum and that appropriate measures are taken to mitigate any adverse effects during the construction.

- (a) The Contractor shall exercise care to preserve the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work. Except where clearing is required for permanent works, all trees, native shrubbery, and vegetation shall be preserved and shall be protected from damage by the Contractor's construction operations and equipment. All unnecessary destruction, scarring, damage or defacing resulting from the Contractor's operations shall be repaired, replanted, reseeded or otherwise corrected as directed by the Engineer, and at the Contractor's expense.
- (b) The Contractor shall ensure that measures are in place to control soil erosion and water pollution, by use of berms, dykes, silt fences, brush barriers, dams, sediment basins, filter mats, netting, gravel, mulches, grasses, slope drains, contour banks, and other erosion control devices and methods. Temporary erosion control provisions shall be coordinated with permanent erosion control features to assure economical, effective and continuous measures throughout the period of the works. The Contractor's attention is drawn to the requirements of Clause 502, in that works need to be progressively finished so that permanent vegetation can establish quickly to mitigate soil erosion and erosion of drains.
- (c) The Contractor shall provide all the labour, equipment, materials, and means required and shall carry out proper and efficient measures wherever and as often as necessary to minimise the dust nuisance.
- (d) The Contractor shall comply with all applicable Kenyan laws, orders and regulations concerning the prevention, control and abatement of excessive noise. Blasting, use of jackhammers, pile driving, rock crushing, or any other activities producing high-intensity impact noise may be performed at night only upon approval of the Engineer.
- (e) Immediately after extraction of materials, all borrows pits shall be backfilled to the satisfaction of the Engineer. In particular borrow pits near the project road shall be backfilled in such a way that no water collects in them.
- (f) Spilling of bitumen fuels Oils and other pollutants shall be cleared up.

(g) The Contractor's attention is drawn to the requirements of the Standard Specification in regard to the environment and in particular to the following clauses:

Clause 115: Construction Generally

Clause 116: Protection from Water

Clause 136: Removal of Camps

Clause 605: Safety and Public Health Requirements Clause

Clause 607: Site Clearance and Removal of Topsoil and Overburden

(h) Payment in respect of this Clause 142 is included as a Lump Sum in the Bill of Quantities. Payment of the Lump Sum will be by equal monthly instalments over the period of the Contract excluding the Period of Maintenance. The total sum of the instalments shall not exceed the Lump Sum, and payment of the monthly instalment will only be made for that month if the Engineer is satisfied that the Contractor has fully complied with the requirements of Clause 142, otherwise the Contractor shall forfeit such instalment.

SECTION 2: MATERIALS AND TESTING OF MATERIALS

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

SECTION 24 – ELECTRICAL AND STREET LIGHTING INSTALLATION

2401 GENERAL

This specification is to be read in conjunction with the Drawings which are issued with it. The items of work comprising Bill of Quantities shall be carried out in accordance with this specification.

The works comprise a complete installation of street lighting system for the section of road that shall be determined by the Engineer. The Works include trenching for and installation of electrical cables, erection of lighting columns and mounting of street light lanterns, installation of controls and all associated electrical wiring, liaison and payment of fees to the electrical power provider, and testing and commissioning of the full system.

2402 STANDARD OF MATERIALS

Where the material and equipment are specifically described and named in the Specification followed by approved equal, they are so named or described for the purpose of establishing a standard to which the Contractor shall adhere.

Should the Contractor install any material not specified herein before receiving approval from the proper authorities, the Engineer shall direct the Contractor to remove the material in

question immediately. The fact that this material has been installed shall have no bearing or influence on the decision by the Engineer.

All materials condemned by the Engineer as not approved for use, are to be removed from the premises and suitable materials delivered and installed in their place at the expense of the Contractor. All materials required for the works shall be new and the best of the respective kind and shall be of a uniform pattern.

2403 WORKMANSHIP

The workmanship and method of installation shall conform to the best standard practice. All work shall be performed by skilled tradesmen and to the satisfaction of the Engineer. Helpers shall have qualified supervision.

Any work that does not in the opinion of the Engineer, conform to the best standard practices will be removed and reinstated at the Contractor's expense.

Permits, Certificates or Licenses must be held by all tradesmen for the type of work in which they are involved where such Permits, Certificates or Licenses exist under Government Legislation.

The Contractor shall comply with the following:-

- 1. Government Electricity Specifications No. 1 and 2.
- 2. All requirements of Kenya Power and Lighting Company Limited, IEE wiring regulations Communications Authority of Kenya (CAK) and the Energy and Petroleum Regulatory Authority (EPRA)

2404 PROCUREMENT OF MATERIALS

The Contractor is advised that no assistance shall be given in the procurement or allotment of any materials or product to be used in or necessary for the construction and completion of the works.

Contractor is warned that he must make his own arrangements for the supply of materials and/or products specified in or required for the Contract. The Contractor may be called upon to show evidence that satisfactory arrangements have been made for the procurement of any or all materials and/or products required to complete the works. Copies of purchase orders to suppliers may be requested.

The Contractor shall be responsible for all site and drawing measurements required for completion of quantities or materials required the proper execution of Works.

The Contractor shall order material based on quantities taken from his own approved working drawings and as verified and approved by the Engineer and not from the quantities shown on the Contractor Drawings or in the Bill of Quantities.

No claims or extra payment will be considered on the ground of insufficient knowledge, inaccurate measurements or other errors on the part of Contractor.

2405 WORKING DRAWINGS

Before manufacture or fabrication is commenced the Contractor shall submit two (2) copies of details Drawings of all control pillars, meter cubicles, medium voltage switchboards including their components showing all pertinent information including sizes, capacities, construction details, etc, as may be required to determine the suitability of the equipment for the approval of Engineer. Approval of the detailed Drawings shall not relieve the Contractor of the full responsibility of errors or the necessity of checking the drawings himself or of furnishing the materials and equipment and performing the work required by the plans and Specifications.

2406 AS BUILT DRAWINGS

These diagrams and Drawings shall show the completed installation including sizes, runs and arrangements of the installation. The Drawings shall to scale not less than 1:50 and shall include plan views and section.

The Drawings shall include all the details which may be useful in the operation, maintenance or subsequent modifications or extensions to the installation.

Three sets of diagrams and Drawings, including one electronic copy, shall be provided, all to the approval of the Engineer.

One colored set of line diagrams relating to operating and maintenance instructions shall be framed and, mounted in a suitable location.

2407 REGULATIONS AND STANDARDS

All work executed by the Contractor shall comply with the current edition of the "Regulations" for the Electrical Equipment of Buildings, issued by the Installation Electrical Engineers and with the Regulations of the Local Electricity Authority.

Where the two sets of regulations appear to conflict, they shall be clarified by Engineer. All materials used shall comply with relevant Kenya Bureau of Standards Specifications.

2408 SETTING OUT WORK

The Contractor, at his own expenses, is to set out works and take all measurements and dimensions required for the erection of his materials on Site; making any modifications in details as may be found necessary during the progress of the Works; submitting any such modifications or alterations in detail to the Engineer before proceeding and must allow his Tender for all such modifications and for the provision of any such sketches or Drawings related thereto.

2409 POSITIONS OF ELECTRICAL PLANT AND APPARATUS

The routes of cables and approximate positions of switchboards etc, as shown on the Drawings shall be assumed to be correct for purpose of Tendering, but exact positions of all electrical Equipment and routes of cables must be agreed on site with Engineer before any Work is carried out.

2410 M.C.B. DISTRIBUTION PANELS AND CONSUMER UNITS

All cases of MCB Panels and consumer units shall be constructed in heavy gauge sheet hinged covers.

Removable undrilled gland plates shall be provided on the top and bottom of the cases. Miniature circuit breakers shall be enclosed in modeled plastics with the tripping mechanism and are chambers separate and sealed from the cable terminals.

The operating dolly shall be trip free with a positive movement in both make and break position. Clear indication of the position of the handle shall be incorporated.

The tripping mechanism shall be on inverse characteristic to prevent tripping in temporary overloads and shall not be affected by normal variations in ambient temperature.

The breakers shall be grouped in distribution panels as specified with all live metal being shrouded or concealed during normal use.

A locking plate shall be provided for each of breaker. A complete list of circuit details on typed cartridge paper glued to stiff cardboards and covered with a sheet of Perspex, and held in position with four suitable fixings, shall be lifted to the inner face of the lids of each distribution panel. The appropriate MCB ratings shall be stated on the circuit chart against each circuit in use.

Ivorine labels shall be secured to the installation barriers in such a manner as to indicate the number of the circuits shown on the circuit chart. Insulated barriers shall be fitted between phases, and neutrals in all boards, and to shroud live parts.

Neutral cables shall be connected to the neutral bar in the same sequence as the phase cables are connected to the MCB's. This shall also apply to earth bars when installed.

2411 FUSED SWITCHGEAR, ISOLATORS AND CUTOUTS

All fused switchgear and isolators whether mounted on machinery, walls or industrial panels shall conform to the requirements of KS 04-226 part 1: 1985.

All contacts are to be fully shrouded and are to have a breaking capacity on manual operations as required by KS 04-182: 1980.

Fuse links for fused switches are to be of high rupturing capacity cartridge type, conforming to $KS\ 04 - 183$: 1978.

Isolators shall be load breaking/fault making isolators.

Fused switches and isolators are to have separate metal enclosures. Mechanical interlocks are to be provided between the door and main switch operating mechanism so arranged that the door may not be opened with the switch in the "ON" position. Similarly; it shall not be possible to close the switch with the door open except that provision to defeat the mechanical interlock and close the switch with the door in the isolators shall be clearly indicated by a mechanical flag indicator or similar device. In T.P and N fused switch units, bolted neutral links are to be fitted.

2412 CONDUITS AND CONDUIT RUNS

Conduit systems are to be installed so as to allow the loop-in system of wiring.

All conduits shall be black rigid super high impact heavy gauge Class "A" PVC in accordance with KS 04-179: 1988 and IEE Regulations. No conduit less than 20mm in diameter shall be used anywhere in this installation.

Conduit shall be installed buried in plaster work and floor screed except when run on wooden or metal surface when they will be installed surface supported with saddles every 600mm. conduit run in chases shall be firmly held in position by means of substantial pipe hooks driven into wooden plugs.

The Contractor attention if drawn to the necessity of keeping all conduits entirely separate from other piping services such as water and no circuit connections will be permitted between conduits and such pipes.

All conduits shall be arranged wherever possible to be self-draining to switch boxes and conduit outlet points for fittings.

The systems, when installed and before wiring shall be kept plunged with well switch boxes and when short conduit pieces are used as plugs, they shall be doubted over and tied firmly together with steel wire. Before wiring all conduit systems shall have carried out until the particular section of the conduit installation is complete in every respect.

The sets and bends in conduit runs are to be formed on Site using appropriate size bending springs and all radii of bends must not be less than 2.5 times the outside diameter of the conduit. No solid or inspection bends, tees or elbows will be used.

Conduit connections shall either be by a demountable (screwed up) assembly or adhesive fixed and water tight by solution. The tube and fittings must be clean and free of all grease before applying the adhesive. When connections are made between the conduit and switch boxes, circular or non-screwed boxes and care must be taken to ensure that no rough edges of conduit stick out into the boxes.

Runs between draw in boxes are not to have more than two right angle bends or their equivalent. The Contractor may be required to demonstrate to the Engineer that wiring in any particular run easily withdrawable and the Contractor may, at no extra cost to the Contract; be required to install addition draw-in boxes required. If conduit is installed in straight runs in excess of

6,000mm, expansion couplings as manufactured by Engtube, shall be used at intervals of 6,000mm.

Where conduits runs are to be concealed in pillars and beams, the approval of the Engineer, shall be obtained. The Contractor shall be responsible for making the accurate position of all holes, chases etc., on site, of if the Engineer so directs, shall provide the Contractor with dimensional Drawings to enable him to mark out and form all holes and chases. Should the Contractor fail to inform the Engineer of any inaccuracies in this respect, they shall be rectified at the Contractor's expenses.

It will be the Contractors responsibility to ascertain from site, the details of reinforced concrete or structural steelwork and check from the builder's Drawings the positions of wills, structural concrete and finishes. No reinforced concrete or steelwork may be drilled without first obtaining the written permission of the Engineer.

The Drawings provided with these specifications indicate the appropriate positions only of points and switches, and it shall be the Contractors responsibility to mark out and centre on Site the accurate positions where necessary in consultation with the Engineer. The Contractor shall be responsible for the accuracy of the final position.

2413 CONDUIT BOXES AND ACCESSORIES

All conduit outlets and junction boxes are to be either malleable iron and of standard circular pattern of the appropriate type to suit saddles being used or supper high impact PVC manufactured KS 04 -179: 1983.

Small circular pattern boxes are to be used with conduits up to and including 25mm outside diameter and larger. Rectangular pattern adaptable boxes are to be used for conduits of 32mm outside diameter and larger. For Drawing in of cables in exposed runs of conduit, standard pattern through boxes are to be used:

Boxes are to be not less than 50mm deep and of such dimensions as will enable the largest appropriate number of cables for the conduit sizes to be drawn in without excessive bending.

Outlet boxes for lighting fittings are to be of the loop-in type where conduit installation is concealed and the Contractor shall allow one such box per fitting, except where fluorescent fittings are specified when two such boxes per fitting shall be fitted flush with ceiling and if necessary fitted with break joint rings. Pattresses shall be fitted where required to outlets on surface conduit runs.

Adaptable boxes are to be of PVC or mild steel (of not less than 12swg) and black enameled or galvanized finish according to location. They shall be square or oblong shape location. They shall be of square or oblong shape complete with lids secured by four 2 BA brass roundhead screws. No adaptable box shall be less than 75mm x 75mm x 50mm or larger than 300mm x 300mm x 75mm and shall be adequate in depth in relation to the size of conduit entering it. Conduit shall only enter boxes by means of conduit bushes.

2414 LABELS

Labels fitted to switches and fuse boards:-

- (i) Shall be Ivorine engraved black on white.
- (ii) Shall be secured by R.H. brass screws of same manufacturing throughout.
- (iii) Shall indicate on switches:-
- a) Reference number of switch
- b) Specified current rating
- c) Item of equipment controlled.
- (iv) Shall indicate on MCB panels:-
- a) Reference number
- b) Type of board, i.e., lighting, sockets, etc.
- c) Size of cable supplying panel
- d) Where to isolate feeder cable
- (v) Shall be generally not less than 75 x 50mm.

2415 EARTHING

The earthing of the installation shall comply with the following requirements;-

- (i) It shall be carried out in accordance with the appropriate sections of the current edition of the Regulations, for the Electrical Equipment of Building issued by Institute of Electrical Engineers of Great Britain.
- (ii) At all main distribution panels and main service positions a 25mm x 3mm minimum cross section area Copper tape shall be provided and all equipment including the lead sheath and armouring of cables, distribution boards and metal frames shall be bonded thereto.
- (iii) The earth tape in Sub-Clause (ii) shall be connected by mean of a copper tape or cable of suitable cross-sectional area to an earth electrode which shall be a copper earth rod (see later Sub-Clause).
- (iv) All tapes to be soft high conductivity copper, untinned except where otherwise specified and where run underground on or through walls, floors, etc., it shall be served with corrosion resisting tape or coated with corrosion compound and braided.
- (v) Where the earth electrode is located outside the building a removable test link shall be provided inside the building as near as possible to the point of entry to the tape, for isolating the earth electrode for testing purposes.

- (vi) Earthing of sub-main equipment shall be deemed to be satisfactory where the sub-main cables are M.I.C.S. or conduit with separate earth wire, and installation is carried out in accordance with the figures stated in the current edition of the I.E.E. Regulations.
- (vii) Where earth rod is specified (see Sub-Clause (iii) it shall be proprietary manufactured, solid hand drawn copper 15mm diameter driven into the ground to a minimum depth of 3.6m. It shall be made up to 1.2m sections with internal screw and socket joints and fitted with hardened steel tip and driving cap.
- (viii) Earth plates will not be permitted.
- (ix) Where an earth rod is used the earth resistance shall be tested in the manner described in the edition of the I.E.E Regulations, by the Contractor in the presence of the Engineer and the Contractor shall be responsible for the supply of all test equipment.
- (x) Where copper tape is fixed to the building structure, it shall be by means of purpose mad non-ferrous saddles which space the conductor away from the structure a minimum distance of 20mm. Fixings shall be made using purpose made plugs. No fixings requiring holes to be drilled through the tape will be accepted.
- (xi) Joints in copper tape shall be tinned before assembly riveted with a minimum of two copper rivets and seated solid.
- (xii) Where holes are drilled in the earth tape for connection to items of equipment the effective cross sectional area must not be less than required to comply with the IEE Regulations.
- (xiii) Bolts, nuts and washers for any fixing to the earth tape must be of non-ferrous material.
- (xiv) Attention is drawn to the need for the earthing metal parts of lighting fittings and for bonding ball joint suspension in lighting fittings.

2416 CABLES AND FLEXIBLE CORDS

All cables used in this Contract shall be manufactured in accordance with the current appropriate Kenya Standard Specifications which is as follows:-

PVC Insulated Cables and Flexible Cords - KS 04 – 192: 1988

PVC Insulated Amoured Cables - KS 04 – 194: 1990

Amouring of Electric cables - KS04 – 290: 1987

The Contractor will, at Engineer's discretion, be required to submit samples of cables for the Engineer's approval. The Engineer reserves the right to call for the cables of an alternative manufacture without any extra cost being incurred.

PVC insulated cables shall be 500/1000 volt grade. No cables smaller than 1.5mm2 shall be used unless otherwise specified. The installation and the finish of cables shall be as detailed in

later Clauses. The colour of cables shall conform to the details stated in the "Cables Braid and Insulation Colours" Clause.

2417 ARMOURED P.V.C. INSULATED AND SHEATHED CABLES

These shall be 600/1000 volt grade manufactured to KS 04 - 194: 198 and KS 04 - 187/188 with copper stranded conductors.

The wire armour of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armour shall have a resistance not more than twice of the largest current carrying conductor of the cables.

PVC/SWA/PVC cables shall be terminated using "Telecom B" type or approved equal or approved equal glands and a PVC tapered sleeve shall be provided to shroud each gland.

Where cables rise from floor level to switchgear etc., they shall be protected by PVC conduit, to a height of 600mm from finished floor level, whether the cable is run on the surface or recessed into the wall.

2418 CABLE SUPPORTS, MARKERS AND TILES

All PVC/SWA/PVC cables run inside the building shall be fixed bin rising ducts or on ceilings by means of die cost cables hooks or clamps, or appropriate size to suit cables, fixed by studs and back nuts to their channel sections.

Alternatively, fixing shall be by BICC claw type cleating system with die-cast cleats and galvanized mild steel back straps or similar approved equal method. For one or two cables run together the cleats shall be fixed a special channel section supports or back straps described above which shall in turn be secured to walls or ceilings of ducts by raw bolts.

In excessively damp or corrosive atmospheric conditions special finishes may be required and the Contractor shall apply to the Engineer for further instructions before ordering cleats and channels for areas.

The above type of hooks and clamps and channels or cleats and black straps shall also be used for securing cables in vertical ducts.

Cables supports shall be fixed at 600mm maximum intervals, the supports being supplied and erected under this Contract. Saddles shall not be used for supporting cables nor any other type of fixing other than one of the two methods described above or other system which has received prior approval of the Engineer.

Cables are to be kept clear of all pipe work and the Contractor shall work in close liaison with others services Contractors.

The Contractor shall include for the provision of fixing of approved type of coloured slip on cables end markers to indicate permanently the correct phase and neutral colours on all ends.

Provisions shall be made for supplying and fixing approved non-corrosive metal cable markers to be attached to the outside of all PVC/SWA/PVC cables at 15mm intervals indicating cable size and distinction.

Where PVC/SWA/PVC cables are outside the building they shall be laid underground 750mm deep with protecting concrete interlocking cover tiles laid over which shall be provided and laid under this Contract.

All necessary excavations and reinstatement of ground including sanding or trenches will be carried out by the Contractor, unless otherwise stated.

2419 PVC INSULATED CABLES

Shall of non-braided type as CMA reference $6491 \times 600/1000/1000$ volt grade cables or equal and approved.

PVC cables shall conform to the details of the "Cables and Flexible Cords" and "Cable Braid and Insulation Colours" Clauses.

2420 HEAT RESISTING CABLES

Final connections to cookers, water heaters, etc., shall be made using butyl rubber insulated cable as CMA reference 610 butyl (Single core 600/1000 volt).

This type of cable shall be used in all instances where a temperature exceeding 1000F (37.70C), but not exceeding 1500F (65.50C) is likely to be experienced. Final connections to all lighting fittings (and other requirements where a temperature in insulated cable or equivalent and approved.

2421 FLEXIBLE CORDS

Shall be insulated in accordance with the "Cable and Flexible Cords" Clause. No cord shall be less than 24/0.2mm in size unless otherwise specified.

Circular white twin TRS flex shall be used for plain pendant fittings up to 100watts. For all other types of lighting fittings the flexible cable shall be silicone rubber insulated.

No polythene insulated flexible cable shall be used in any lighting fitting or other appliance (see "Heat Resisting Cables" Clause 30).

2422 CABLE ENDS AND PHASE COLOURS

All cables ends connected up in switchgear, MCB panels etc., shall have the insulation carefully cut back and the ends sealed with Hellerman rubber slip on cable end markers.

The markers shall be of appropriate phase colour for switch and all other live feeds to the details of the "Cable Insulation Colours" Clause. Black cable with black end markers shall only be used for neutral cables.

2423 CABLE INSULATION COLOURS

Unless otherwise stated in later clauses, the insulation colours shall be in accordance with table below.

Where other systems are installed the cable colours shall be in accordance with the details stated in the appropriate clause.

System, lighting & Power	Insulation colour	Cable end marker	
Main and sub-mains			
a) Phase b) Neutral	Red Black	Red Black	
Sub-Circuits single Phase			
a) Phase b) Neutral	Red Black	Red Black	

The cables shall be laid on 50mm bed sifted soil and covered with a 50mm layer of sifted soil. Cable tiles in the standard design shall be laid on top in a continuous formation without gaps in between. When passing under roadways and/or driveways, ducting as specified shall be provided. No trench shall be backfilled without the approval of the Project Manager. Failure to comply with this clause may lead to re-excavation at the Contractor's own expense. Cables shall be "snaked" along their route to allow for ground subsidence and a 2% allowance shall be added to the measured route length.

All cable measurements shall be deemed to include allowance for the above precautions. "Loop-in" and "Loop-out" arrangements shall be used at every poles. Wiring to the lanterns on each pole shall be with 1.5mm P.V.C. twin insulated and sheathed cable with earth wire and shall be protected by 5A cartridge fuse. Cables across the roads and at the entrance of the poles shall be laid in ducts. No underground joints shall be permitted.

Aluminum cables shall only be allowed where specifically instructed in writing by the Project Manager. Special care shall be taken when terminating aluminum conductors. Conductors to be terminated in a pillar type shall be mechanically sagged and fitted with a phosphor bronze sleeve, whilst those to be terminated with lags shall have these fitted with a purpose made compression tool.

No deviation from the cable route shown on the Contract drawings shall be made for economy or for any other reason without the written approval of the Project Manager.

Cable markers of the Standard design shall be installed where shown on the drawings. After installation the cables shall be tested in accordance with Government Electrical Specification No. 2 and the results recorded.

2424 SUB-CIRCUIT WIRING

For all lighting and sockets wiring shall be carried out in the "looping in" system and there shall be no joints whatsoever. No lighting circuits shall comprise more than twenty (20) points where protected by 10 Amps MCB. Cables with different cross-section area of copper shall not be used in combination.

- i. Lighting circuits PVC Cable.
- ii. 1.5mm2 for all lighting circuits indicated on the drawing.
- iii. Power circuits PVC cable (minimum sizes).
- iv. 2.5mm2 for one, two or three 5Amps sockets wired in parallel.
- v. 2.5mm2 for one 15Amps socket.
- vi. 2.5mm2 for maximum of ten switched 13 Amps sockets wired from 30Amps MCB.

The wiring sizes for lighting circuits and sockets are shown on the Drawings. In such cases, the sizes shown on the Drawings shall prevail over the sizes specified.

Wiring sizes for other appliances shall be shown on the Drawing or Specified in later Clauses of this specification.

2425 SPACE FACTOR

The maximum number of cables that may be accommodated in given size of conduit or trunking or duct is not to exceed the number in Tables B.5 and B.6 or as stated in Regulations B.91, and B.118 of the I.E.E Regulations whichever is appropriate.

2426 INSULATION

The insulation resistance to earth and between poles of the whole wiring system, fittings and lamps, shall not be less than the requirements of the latest edition of the I.E. Regulations. Complete tests shall be made on all circuits by the Contractor before the installations are handed over.

A report of all tests shall be furnished by the Contractor to the Engineer. The Engineer will then check test with his own instruments if necessary.

2427 LIGHTING SWITCHES

These shall be mounted flush with the walls, shall be contained in steel or alloy boxes and shall be of the gang's ratings and types shown in the drawing. They shall be as manufactured by M.K Electrical Ltd., or other equal and approved to KS 04 - 247: 1988.

2428 SOCKETS AND SWITCHED SOCKETS

These shall be flush pattern in steel/PVC box and shall be of the gangs and type specified in the Drawings.

They shall be 13 Amps, 3-pin, shuttered, switched and as manufactured by "M.K. Electrical Company Ltd", or other approved equal to KS 04 - 246 : 1987.

2429 FUSED SPUR BOXES

These shall be flush, D.P switch as in steel/PVC box and of type and make specified in the Drawings complete with pilot light and as manufactured by "M.K. Electrical Company Ltd", or other approved equal to KS 04 - 247: 1988.

2430 COOKER OUTLETS

These shall be flush mounted with 13 Amp switched socket outlet and neon indicator lamps.

The cooker control unit shall be as manufactured by "M.K. Electrical Company Ltd", or other approved equal to KS 04 - 247: 1988.

2431 CONNECTORS

These shall be specified in the Drawings with appropriate rating. These shall be fitted lighting fitted at all conduit box lighting point outlets for jointing of looped PVC cables with flexible cables of specified quality.

2432 LAMP HOLDERS

These shall be of extra heavy H.O skirted and shall be provided for every specified lighting fitting and shall be B.C., E.S., or G.E.S as required. All E.S. and G.E.S. holders shall be heavy brass type (except for plain pendants where the reinforced Bakelite type shall be used). The screwed cap of the E.S and G.E.S. holders shall be connected to the neutral.

Where holders are supported by flexible cable, the holders shall have "cord grip" arrangements and in the case of metal shades earthing screws shall be provided on each of the holders.

The Contractor must order the appropriate type of holder when ordering lighting fittings, to ensure that the correct types of holders are provided irrespective of the type normally supplied by the manufacturers.

2433 LAMPS

All lamps shall be suitable for normal stated supply voltage and the number and sizes of lamps detailed on the Drawings shall be supplied and fixed. The Contractor must verify the supply voltage with the supply authority before ordering the lamps.

LED lamps shall be used in all fittings unless otherwise specified.

2434 LIGHTING FITTINGS AND STREET LIGHTING LANTERNS

This Contract shall include for the provision, handling charges, taking the delivery, safe storage, wiring (including internal wiring) assembling and erecting of all lighting fittings shown on the Drawings.

All fittings and pendants shall be fixed to the conduit boxes with brass R/H screws. These to be in line with metal finishing of fittings. The lighting fittings are detailed for the purpose of establishing a high standard of finish and under no circumstances will substitute fittings be permitted.

In case of rectangular shaped ceiling fittings, the extreme ends of the fittings shall be secured to suitable support in addition to the central conduit box fittings. Supports shall be provided and fixed by the Contractor.

The whole of the metal work of each lighting fittings shall be effectively bonded to earth. In the case of ball and/or knuckle joints short lengths of flexible cable shall be provided, bonded to the metal work on either side of the joints. If the above provisions are not made by the manufacturers, the Contractor shall include cost of additional work necessary in this tender. See "Flexible Cords" Clause for details of internal wiring of lighting fittings. Minimum size of internal wiring shall be 20/0.2mm (23/0067). Each lighting fitting shall be provided with number type and suspended as shown on the Drawings.

Normally, the units shall be lined up on vertical centre lines, but where it is necessary to mount units at low levels they shall be lined up horizontally.

Street lighting lanterns shall be side entry lanterns for HPS-T lamp with high performance reflector, polycarbonate bowl gear tray with anti cycling igniter and as Phillips SGS 102 K SKN – T250W II MR AS ST complete with approved lamps. The lantern is to be secured with anti-vandalism mechanism on to the steel columns.

2435 POSITIONS OF POINTS AND SWITCHES

Although the approximate positions of all points are shown on the Drawings enquiry shall be made as to the exact positions of all MC.B panels, lighting points, socket outlets etc., before is actually commenced. The Contractor must approach the Engineer with regard to the final layout of all lights on the ceiling and walls.

The Contractor must consult with the Engineer on site regarding the positions of all alterations made necessary by the non-compliance with the Clause.

2436 STREET/SECURITY OUTDOOR LIGHTING COLUMNS

Street lighting columns shall be made from galvanized steel pipe sections conforming to B.S 1840:1952. The columns shall be 15.0 meters steel galvanized floodlighting round column (made from 111 Class "B") complete with approved fittings with Bulbs as Thorn painted with rust proof aluminum paint with a lockable anti-vandalism door.

The column base shall be sunk to a minimum of 1000mm into the ground on 750mm square x 300mm deep 20/20 concrete foundation, and the pole up to 150mm from the ground level shall be surrounded in 250mm 20/20 concrete. The top bracket and plain section of the column shall be common to and interchangeable with all brackets with maximum mismatch tolerance of 3mm between two coats of aluminum paint. All columns shall be complete with 100/80 Amps

fused twin cut-out as Henry (UK) or equivalent. The lockable door to the connectors shall be 1700mm from ground level.

2437 TIMING CONTROL SWITCH

These shall be installed with a 24-hour Timer switch with 200hr reserve (Omron) which will operate on a present timing. It shall be installed in every Control Pillar to serve the lighting fittings served by that particular control pillar. The initial adjustment will be done with the approval of the Engineer.

2438 WIRING SYSTEM FOR STREET LIGHTING

Cables shall 6mm2 2-core and 4-core as indicated on the Drawings, and shall be laid in a cable trench 600mm deep along the road side and 900mm deep across the roads and 900mm away from the road kerb or 1,500mm away from the edges of the road. "Loop-in" and "loop-out" arrangement shall be used at every pole. Wiring to the lanterns on each pole shall be with 1.5mm2 PVC twin insulated and sheathed cable with earth wire shall be laid at least 600mm below the finished road level on a compact bed of murram at least 50mm thick and covered with a concrete surrounded 150mm thick.

2439 METAL CONTROL PILLAR

These shall be metal clad fabricated as per Contract Drawings and Specification. The Contractor shall supply, install, test and commission control pillars including supplying, fixing and connecting switch gears as detailed on the appropriate Drawings.

2440 CURRENT OPERATED EARTH LEAKAGE CIRCUIT BREAKER

Current operated earth leakage breaker shall conform to B.S.S. 4293: 68 rated at 240volts D.P. 50cycles AC Mains.

The breaker shall be provided with test switch and fitted in weather proof enclosure for surface mounting. The rated load current and earth fault operating current shall be specified in the Drawings. These shall be as manufactured by Crabtree, Siemens or other equal and approved. They shall be of the high sensitivity type i.e. they will trip in o30milliseconds for a leakage current of 30m A and shall be of a type not requiring a mains supply to operate the trip mechanism under fault conditions such as the Crabtree or the Siemens 30Ma model.

2441 M.V. SWITCHBOARD AND SWITCHGEAR

The switchboard shall be manufactured in accordance with KS04-226 which co-ordinates the requirements for electrical power switchgear and associated apparatus. It is not intended that this K.S. should cover the requirements for specified apparatus for which Kenyan Standard exist. All equipment and material used in the switchboard shall be in accordance with shall be in accordance with the appropriate Kenyan Standard.

The switchboard shall comprise the equipment shown on the Drawings together with all current transformers, auxiliary fuses, labels, small wiring and interconnections necessary for the satisfactory operation of the switchboard.

Switchboard shall be of the flush fronted, enclosed, metal clad type with full front or rear access as called for in the particular specifications, suitable for indoors use, sectionalized as necessary to facilitate transport and erection. The maximum height of containing all field terminals shall be provided at the top or bottom of the switchboard as appropriate.

Before manufacture, the Contractor shall submit to the consulting Engineer for approval of detailed Drawings showing the layout, construction and connection of the switchboard.

All bus-bars and bus-bar connections shall consist of high conductivity copper and be provide in accordance with KS 04 - 226: 1985. The bus-bars shall be clearly marked with the appropriate phase and neutral colours which should be red, yellow, blue for the phases and black for neutral. The bus0bars shall be so arranged in the switchboard that the extensions to the left and right may be made in the future with ease should the need arise.

Small wiring, which will be nearly arranged and cleated, shall be executed in accordance with B.S. 158 and the insulation of the wiring shall be coloured according to the phase or neutral connection.

Switches and fuse switches, shall be in strict accordance with KS 04 - 183: 1978 Class 2 switches. Means of locking the switch in the "OFF" position shall be provided.

All fuse switches shall comply with KS 04 - 183:1978, Part 2 and 3 a fault rating at least to the fault of the switchboard in which they are installed. Cartridge fuse links to KS 04 - 183:1978 category A.C. 46, Class Q1 and fusing factor not exceeding 1.5 shall be supplied with each fused switch.

Mounting arrangements shall be such that individual complete fuse switches may be disconnected and withdrawn when necessary without extensive dismantling work. When switches are arranged in their formation all necessary horizontal and vertical barriers shall be provided to ensure segregation from adjacent units. Means of locking the switch in the "OFF" position shall be provided.

2442 STEEL CONDUITS AND STEEL TRUNKING

Conduits shall be of heavy gauge class"B" welded to Standard Specification KS 04-180:1985. In no case will conduit smaller than 20mm diameter be used on the works. Conduits installed within buildings shall be black enameled finish except where specified otherwise. Where installed externally or in damp conditions they shall be heavy galvanized. Conduit fittings, accessories or equipment used in conjunction with galvanized conduit shall also be galvanized or otherwise as approved by the Engineer.

Metal trunking shall be fabricated from mild steel of not less than 18swg. All sections of trunking shall be rigidly fixed together and attached to the framework of fabric or the building

at intervals of not less than 1.2m. Joint trunking shall not overhang fixing points by more than 0.5m.

All trunks fittings (i.e bends, tees, etc.) shall leave the main through completely clear of obstructions and continuously open except through walls and floors at which points suitable fire resisting barriers shall be provided as may be necessary. The inner edge of bend and tees shall be chamfered where cables larger than 35mm2 are employed.

Where trunking passes through ceiling and walls the cover shall be solidly fixed to 150mm either side of ceilings and 50mm either of walls.

Screws and bolts securing covers to trunking or sections of covers together shall be arranged so that damage to cables cannot occur either when fixing covers or when installing cables in the through.

Where trunking is used to connect switchgear of fuse boards, such connections shall be made by trunking fittings manufactured for this purpose and not by multiple conduit couplings.

Were vertical sections of trunking are used which exceed 4.5m in length, staggered tie off points shall be provided at 4.5m intervals to support the weight of cables.

Unless otherwise stated, all trunking systems shall be painted as for conduit.

Where a wiring system incorporates galvanized conduit and trunking, the trunking shall be deemed to be galvanized unless specified otherwise. The number of cables to installed in trunking shall be such as to permit easy Drawing in without damage to the cables, and shall in no circumstances be such that space factor of 45% exceeded.

Conduit and trunking shall be mechanically and electrically continuous. Conduit shall be tightly screwed between the various lengths so that they butt at the socketed joints. The internal edges of conduit and all fittings shall be smooth, free from burrs and other defects. Oil and any other insulating substance shall be removed from the screw threads. Where conduits terminate in fuse gear, distribution boards, adaptable boxes, non-spouted switchboxes, etc., they shall, unless otherwise stated, be connected thereto by means of smooth bore male brass bushes, compression washers and sockets. All exposed threads and abrasions shall be painted using an oil paint for black enameled tubing and galvanized tubing immediately after the conduits are erected. All bends and sets shall be made cold without altering the section of the conduit. The inner radius of the bend shall not be less than four (4) times the outside diameter of the conduit. Not more than two right angle bends will be permitted without the inter-position of a draw-in-box. Where straight runs of conduit are installed, draw-in-boxes shall ne provided at distances not exceeding 15mm. No tees, elbows, sleeves, either of inspection or solid type, will be permitted.

Conduit shall be swabbed out prior to Drawing in cables, and they shall be laid so as to drain of all condensed moisture without injury to end connections.

Conduits and trunking shall be run at least 150mm clear of hot water and steam pipes, and at least 75mm clear of cold water and other services unless otherwise approved by the Engineer.

All boxes shall conform to KS 04-668:1986, to be of malleable iron, and black enameled or galvanized according to the type of conduit specified. All necessary boxes shall have threaded brass inserts.

Box lids where required shall be heavy gauge metal, secured by means of Zinc plated or cadmium plated steel screws.

All adaptable cables and lids of the same shall be interchangeable. Boxes used on surface work are to be tapped or drilled to line up with the conduit fixed in distance type saddles allowing clearance between the conduit and wall without the need for setting the conduit.

Where used in conjunction with mineral insulated copper sheathed cable, galvanized boxes shall be used and painted after erection.

Draw-in-boxes in the floors are generally to be avoided but where they are essential they must be grouped in positions approved by the Engineer and covered by the suitable floor traps, with non-ferrous trays and covers.

The floor trap covers are to be recessed and filled in with a material to match the floor surface.

The Contractor must take full responsibility for the filling of all covers, but the filling in material will be supplied and the filling carried out by the main Building Contractor.

Where buried in the ground outside the building the whole of the buried conduit is o be painted with two coats of approved bitumastic composition before covering up.

Where run on the surface, unpainted fittings and joints shall be painted with two coats of oil bound enamel applied to rust and grease free metalwork.

2443 TESTING ON SITE

The Contractor shall conduct during and at the completion of the installation and, if required, again at the expiry of the maintenance period, tests in accordance with the relevant sections of the current edition of the Regulations for Electrical Equipment of Building issued by the I.E.E. of Great Britain, the Government Electrical Specification and the Electric Supply Company's By-Laws.

a) Tests shall be carried out to prove that all single pole switches are installed in the "live" conductor.

Tests shall be carried out to prove that all socket outlets and switched socket outlets are connected to the "live" conductor in the terminal marked as such, and that each earth pins effectively bonded to the earth continuity system. Tests shall be carried out to verify the continuity of all conductors of each "ring" circuit.

- b) Phase tests shall be carried out on completion of the installation to ensure that correct phase sequence is maintained throughout the installation. Triplicate copies of the results of the above test shall be provided within fourteen (14) days of the witnessed tests and the Contractor will be required to issue to the Engineer the requisite certificate upon completion as required by the regulations referred to above.
- c) any faults, defects or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation made apparently by such inspections or tests shall be rectified by the contractor at his own expenses.
- d) The contractor shall provide accurate instruments and apparatus and all labour required to carry out the above tests. The instruments and apparatus shall be made available to the Engineer to enable him to carry out such tests as he may require.

The contractor shall generally attend on other contractors employed on the project and carry out such electrical tests as may be necessary.

The contractor shall test to the Engineer's approval and as specified elsewhere in this specification or in the standards and regulations already refereed to, all equipment, plant and apparatus forming part of the works and before connecting to any power or other supply and setting to work.

Where such equipment etc. forms part of or is connected to a system whether primarily or of an electrical nature or otherwise (e.g air conditioning system) the contractor shall attend on and assist in balancing, regulating testing and commissioning, or if primarily an electrical or other system forming part of works, shall balance, regulate, test and commission the system in the Engineer's approval.

The contractor shall submit a completion certificate in the Kenya Power & Lighting Company for electricity connection and furnish copies of all test results mentioned in this section to the Engineer.

Super	vision Check L	ist														
Projec	t Name:		PERFORMAN ROAD	CE BASEI	O CONTR	ACT FOR	MAINTE	NANCE (OF STREE	T LIGHTI	NG ON A	THI RIVE	ER - BISIL	(A2)	Date	Signatures
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1	Execution system in general	1-1	Works Execution Programme (including its revised version if any) is submitted before the date													

			specified in contract document						
		1-2	Works Execution Programme properly reflects the given specification s and site conditions						
		1-3	Execution procedures are in accordance with Works Execution Programme						
2	Equipment holding	2-1	All equipment used are properly mobilized in accordance with Works Execution Programme						

		2-2	All equipment used is well maintained during the execution of works					
3	Contractor 's in-house staff	3-1	Qualified technical staff of Contractor are properly assigned as specified in Works Execution Programme					
		3-2	Contractor's in-house key staff understand work process and schedule properly					
		3-3	Contractor's in-house staff give					

			technical guidance and direction to workers and operators properly and timely						
		3-4	Communicat ions with authority in writing is properly and timely						
4	Personnel employme nt	4-1	Workers and operators are deployed in accordance with Works Execution Programme						
		4-2	Wage payment is properly made on time						
5		5-1							

	Site base facilities		Office and stockyard are prepared in accordance with Works Execution Programme						
		5-2	Site is well maintained during the work execution and cleared on completion						
		5-3	Material stored on site is properly managed during the work execution						
6	Quality and quantity	6-1	Material testing, structural examination						

managem ent		, and measureme nts are properly and Periodically conducted based on specification s and Works Execution Programme						
	6-2	Results of material testing, structural examination and measureme nts are within the specification s.						
	6-3	Results of material testing, structural examination , and measureme						

			nts are properly compiled as reports for confirmatio n						
7	Work scheduling	7-1	Understandi ng of critical path and its reflection on scheduling is proper						
		7-2	Actual proceedings are periodically compared to the planned schedule described in Works Execution Programme						
		7-3	Changes caused by site conditions are properly handled to						

			keep things on schedule						
		7-4	All works are completed within the contract term or within the extended term as allowed						
8	Work safety managem ent	8-1	No accident occurs to workers, operators, or third-parties.						
		8-2	Safety of workers and operators is considered						
		8-3	Accident prevention efforts for third-parties are proper						

		8-4	Traffic and site safety devices are properly installed and managed					
		8-5	Temporary facilities (e.g., scaffolding) are constantly checked					
9	Environme ntal and social managem ent	9-1	Environmen tal and social mitigation efforts (e.g., against noise, vibration, emission, and dust) are conducted					
		9-2	Waste material from site is					

	properly disposed						
9-3	Damage to existing roads, works and services is avoided or are repaired when it occurs						
9-4	No overloading for work- related vehicles is reported						

SECTION VII – BILLS OF QUANTITIES

BILLS OF QUANTITIES

The tender includes the following Bills of Quantities:

- i) Bills of Quantities for Maintenance Services
- ii) Bills of Quantities for Rehabilitation Works (if those are required under the contract)
- iii) Bills of Quantities for Improvement Works (if those are required under the contract)

A. BILLS OF QUANTITIES FOR MAINTENANCE SERVICES

- 1. The Bills of Quantities for Maintenance Services shall be read in conjunction with the Instructions to Tenderers, Conditions of Contract, Specifications and the Drawings.
- 2. This Bills of Quantities is the basis for payment of maintenance services that are to be provided on a lump sum per lamp basis for maintaining the roads covered under the contract, at the Service Levels defined in the Specifications. The rates given by the Tenderer shall, except insofar as is otherwise provided under the Contract, include all plant, equipment, labour, management and supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 3. Payment shall be made in accordance with the actual performance of the Contractor and compliance with the Service Level criteria given in the Specifications for each road. Failure to meet the Service Levels will result in payment reductions in accordance with Clause 47 of the General Conditions and the Performance Specifications.
- 4. The unit rates and prices shall be quoted entirely in local currency but payment will be made in the proportions and currencies quoted in the Schedule of Adjustment Data.
- 5. A unit rate or price shall be entered by the Tenderer against each item in the Bill of Quantities. The cost of items against which the Tenderer has failed to enter a unit rate or price shall be deemed to be covered by other unit rates and prices entered in the Bill of Quantities.
- 6. General directions and descriptions of work and materials are not repeated or summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 7. The method of measurement of completed work for payment shall be in accordance with the measurement and payment provisions of the relevant section in the Performance Specifications.
- 8. Arithmetical errors discovered prior to award of the Contract will be corrected by the Procuring Entity pursuant to the Instructions to Tenderers.

B. BILL OF QUANTITIES FOR REHABILITATION AND IMPROVEMENT WORKS

1. The Bills of Quantities for Rehabilitation Works and for Improvement Works shall be read in conjunction with the Instructions to Tenderers, Conditions of Contract, Specifications and the Drawings.

a) Bill of Quantities for Rehabilitation Works

- 2. The Bill of Quantities for Rehabilitation Works presents a number of explicit activities considered necessary to rehabilitate particular road sections before some or all of the Service Level criteria for performance-based maintenance defined in the Specifications can be applied. The Tenderer shall undertake a detailed assessment of road conditions at the time of Tender. The location and extent of the particular rehabilitation works considered necessary to reach required Service Levels shall be indicated by the Tenderer in his Tender submission.
- 3. Although the tendering document may show estimated quantities of Rehabilitation Works, it is the responsibility of the Tenderer to prepare his own estimate for the quantity of work required for each rehabilitation activity, and he shall indicate these quantities in the Bill of Quantities.
- 4. The Procuring Entity may in some cases indicate fixed quantities for some specific Rehabilitation Works, such as asphalt resurfacing. Those cases are clearly indicated as such by the Procuring Entity in the TDS Specifications and the Bill of Quantities for Rehabilitation Works.
- 5. Payment for Rehabilitation Works shall be made in relation to the work outputs satisfactorily completed in conformity with the Specifications as measured by the Contractor and verified by the Engineer, and valued at the unit rates and prices stated in the priced Bill of Quantities. The total price for Rehabilitation Works and Improvement Works, if any, shall not exceed the threshold value or percentage given by the Procuring Entity in the TDS.

b) Bill of Quantities for Improvement Works

- 6. The Bill of Quantities for Improvement Works lists a set of interventions to be carried out by the contractor that add new characteristics to the Road in response to existing or new traffic, safety or other conditions, as defined in the TDS and the Specifications.
- 7. Payment for Improvement Works shall be made in relation to the work items satisfactorily completed in conformity with the Specifications, as measured by the Contractor and verified by the Engineer, and valued at the unit rates and prices stated in the priced Bill of Quantities for Improvement Works.

c) General

- 8. The unit rates and prices Tender in the priced Bill of Quantities shall, except insofar as is otherwise provided under the Contract, include all plant, equipment, labor, supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Unit rates and prices shall also include the cost of engineering design services, and measures needed to prevent or mitigate environmental impacts and safety measures.
- 9. The unit rates and prices shall be quoted entirely in local currency but payment will be made in the proportions and currencies quoted in the Schedule of Adjustments.
- 10. A quantity, unit rate or price shall only be entered against those work items considered necessary to attain the required Service Levels and sustain such Service Levels thereafter through execution of maintenance services that are provided for separately.
- 11. General directions and descriptions of work and materials are not repeated or summarized in the Bill of Quantities. References to the relevant sections of the Contract documentation shall be made before

entering rates or prices against each item in the Bill of Quantities.

- 12. The method of measurement of completed work for payment shall be in accordance with the measurement and payment provisions of the relevant section of the Specifications.
- 13. Arithmetical errors discovered prior to award of the Contract will be corrected by the Procuring Entity pursuant to the Instructions to Tenderers.

PERFORMANCE BASED CONTRACT FOR THE MAINTENANCE OF ATHI RIVER - BISIL (A2) ROAD

SUMMARY BILL OF REHABILITATION / IMPROVEMENT WORKS

BILL NO.	DESCRIPTION	TENDER AMOUNT
1	Preliminary & General Items	
20	Instructed Works	
	Subtotal 1	
	Add 3% Contingency	
Sub Total (Improvement Works)	
26	Performance Based Maintenance over the contract period of 36 months	
Sub-Total (1	Improvement + PBC Works)	
Add 16% V	AT	
Grand Tota	l (Carried to Summary)	

	Item Description	Unit	Quantities	Rate (Ksh.)	Amount (Ksh.)
Bill No. 1 Prelin	minaries and General Item	s	,	, ,	
01-80-016	Provide, erect and maintain publicity signs as directed by the Engineer	No.	2.00		
01-80-019	Provide, fuel and maintain 1No. brand new saloon car of petrol engine capacity not less than 1500cc for exclusive use by the Engineer inclusive of the first 4,000km per vehicle month in accordance with clause 138 of special specification.	V/Month s	36.00		
01-80-020	Extra over 01-80-017 for mileage over 4,000km	KM	500.00		
01-80-026A	Payment of Resident Engineer Miscellaneous account as per Clause 139 of the Special Specification and for items and services detailed in Appendix B	SUM	1,711,450.00		
01-80-027	Extra over 01-80-026A for profits and overheads	%	1,711,450.00		
01-80-030A	Payment of Engineers Supervisory Staff including overtime in accordance with clause 137 of Special Specifications and as per Remunerations Rates in Appendix A	SUM	11,622,000.0		
01-80-031	Extra over 01-80-030A for contractor's overhead and profit.	%	11,622,000.0		

Bill No.	Item Description	Unit	Quantities	Rate (Ksh.)	Amount (Ksh.)
Bill No. 20 Instr	ucted Works (Rehabilitat	ion):	<u>. </u>		1
20-40-018	Supply, transport and install 12 m height	No.	247.00		
	single bracket street lighting columns with				
	arm projection of 1.2 m manufactured from				
	Class C galvanized steel pipe as shown on				
	the drawings and				
	approved by the Engineer.				
20-40-019	Supply, transport and install 12 m height	No.	67.00		
	double bracket street				
	lighting columns with arm projection of 1.2 m				
	manufactured from				
	Class C galvanized				
	steel pipe as shown on				
	the drawings and				
	approved by the Engineer.				
20-40-003	Supply, transport and	No.			
	install circular		3.00		
	continuously tapering,				
	fully galvanized High				
	mast poles with suitable decorative bracket for				
	9no. Fixtures to achieve				
	mounting height of				
	35m from road surface.				
20-40-005	Supply, install, test and	No.	25.00		
	commission suitable		27.00		
	street light fixture for 250w warm white LED				
	fittings for the new				
	High mast poles. As per				
	technical specifications.				
20-40-004	Supply, install, testing	No.	20.00		
	and commissioning of fixture suitable for 30		20.00		
	Watts Led fittings for				
	tunnel lighting.				
20-40-044	Supply, install, testing	No.			
	and commissioning of		600.00		
	Integrated Solar LED				
	Street Light with: i) 100-160W LED				
	Lamp				
	ii) 250W Mono				
	Crystalline Silicon				
	Cells PV module				

	iii) 250Ah Batteries			
	′			
	iv) charge controllers			
	with in-built dusk to			
	dawn programmable			
	timer switch control			
	system and illumination			
	level control			
20-40-015	Payment of electricity	PC SUM		
	bill to Kenya Power		2,000,000.00	
20-40-016	Extra over item 20-40-	%	2,000,000.00	
	015 for contractors		, ,	
	overheads and profits			
20-40-017	Prune/Trim overgrown	KM	2	
20 10 017	tree branches/ leaves	1111	2	
	obstructing the			
	luminaires in liaison			
	with county			
	governments and cart to			
	spoil trimmed / cut			
	branches and leaves.			
20-40-021	Supply, install, test and	No.		
	commission 120 A TP		3.00	
	contactor and			
	Installation shall be			
	complete with			
	provision of approved			
	anchoring material			
20-40-022	Supply, install, test and	No.		
	commission 24hr timer		3.00	
	with 200hr reserve			
	(Omron)			
20-40-023	Supply, install, test and	No.		
20 10 023	commission 100 A	110.	3.00	
	Isolator		3.00	
20-40-024	Supply, install and	No.		
20-40-024	commission 100/80 A	NO.	2.00	
			3.00	
20.40.025	twin cut out fuse	N.T.		
20-40-025	Supply, install and	No.	0.00	
	commission 32 A		9.00	
	circuit breaker			
20-40-026	Supply, install and	No.		
	commission Main		3.00	
	MCCB 100/80Amps			
	with tripping			
	mechanism			
20-40-027	Supply, install and	No.		
	commission 100A		3.00	
	Earth Leakage Circuit			
	Breaker			
20-40-028	Supply and install	M	2,000	
	2.5mm Twin with Earth			
	copper cable for lamp			
	feed			
20-40-029	Supply and install 16	M	600	
20-70-027	mm ² armored copper	141	000	
	min armored copper			

	cable complete with trenching & cable glands			
20-40-031	Supply, install, test and commission control panel with metal cage, rails and concrete base	No.	3.00	
20-40-036	Provide and place concrete case cover for control Pillar (concrete class 20/25)	No.	3.00	
20-40-038	Provide and place concrete case cover for underground cables (concrete class 20/25)	M3	18.00	
20-40-045	Supply, transport and install 1.2m long arm manufactured from Class C galvanized steel pipe on street lighting pole as shown on the drawings and approved by the Engineer or equivalent	No.	112.00	
20-40-046	Remove, transport, repair and reinstall existing damaged poles	No.	70.00	
Sub Total for Bi summary)	ill 20 (carried forward to			

Bill No.26	Performance Maintenance Contract				
Item No.	Description	Units	Quantity	Rate	Amount (KSh)
26-50-005	Maintenance of all the street lighting on the project road to 100% service levels. This includes: 1. 24-hour patrol and surveillance 2. Repair/Replacement of solar fittings, batteries, charge controllers, solar PV modules and all solar accessories 3. Replacement of damaged or worn out accessories 4. Repair/ Replacement of Knocked poles and arms, fittings, control pillars and high-masts complete with all the accessories 5. Repair/ Replacement of Vandalized poles and arms, fittings, control pillars and high-masts complete with all the accessories 6. Anchoring and strengthening of (leaning) poles to upright position using approved gravel material or equivalent. 7. Joint monthly meter reading 8. Provision of security to deter vandalism of the street lighting furniture 9. Liaising and follow ups with KPLC to restore power in case of an outage or other emergencies. 10. Insurance follow up for compensation in case of any damage to Street lighting furniture 11. Pruning of overgrown tree branches obstructing the luminaires in liaison with county governments and spoiling the cuttings 12. Road stakeholder engagement to ensure smooth running of the project (Kenya Police, KPLC, Public, County Government, and Area Chiefs)	Lamp	22,068.00		
	Total				_

APPI	ENDIX A													
No.	Descr	iption		No. of Trai	nings	Rate per 1	raining	Ar	no unt per l	Month	M	onths	Total Am	ount (Kshs.)
1	PROFESSIONAL DEVEL RE'S STAFF	OPMENT T	RAINING OF		2.00		300,000.00			300,000.00		2		600,000.00
				PART II: K	eNHA P	ROJECT STA	FF RENUM	ERATIO	ON SCALE					
				KeNH	IA RE's	Payment of En	gineers Sup	ervisory	Staff					
			Wages & Sala	ries	Pe	erdiem (County	HQs)	I	Perdiem (Ot	hers)		Field Allowa	ances	٦٠
S/No	Description	Duration of Contract	Rate per Month	Amount (Kshs)	No. of Days	Rate per day	Amount (Kshs)	No. of Days	Rate per day	Amount (Kshs)	No. of Days	Rate per day	Amount (Kshs)	TOTAL (Kshs)
1	Resident Engineer	36.00			15.00	12,600.00	189,000.00	15.00	10,500.00	157,500.00	36.00	4200	151,200.00	497,700.00
2	Asst. Resident Engineer	36.00			15.00	10,500.00	157,500.00	15.00	8,400.00	126,000.00	36.00	3500	126,000.00	409,500.00
3	Engineer (Electrical)	36.00			20.00	8,400.00	168,000.00	36.00	7,000.00	252,000.00	36.00	2800	100,800.00	520,800.00
4	Assistant Engineer (Electrical)	36.00	93,500.00	3,366,000.00	-	-	-	-	-	-		0	-	3,366,000.00
5	Inspector (Project)	36.00	80,000.00	2,880,000.00	-	•	-	•		•			-	2,880,000.00
	Driver	36.00	36,500.00	1,314,000.00										1,314,000.00
6	Office Assistant	36.00	36,500.00	1,314,000.00									-	1,314,000.00
7	Intern	12.00	50,000.00	600,000.00										600,000.00
8	Attachees	12.00	10,000.00	120,000.00										120,000.00
			GRAND	TOTAL CARI	RIED FO	RWARD TO	APPENDIX	A 01-80	-030A					11,622,000.00

ART II: KeNHA PROJECT STAFF RENUMERATION SCALE 1. TECHNICAL STAFF **Civil Engineering Degree Holders Gross Monthly** Renumeration S/n **Staff Designation Minimum Qualifications** (Man Months) (KShs) Holds a Degree in Electrical Engineering or its equivalent from an institution recognized by EBK. Registered Graduate Electrical Engineer with ii EBK. 1 **Assistant Engineer** 93,500.00 Has over **3 years Post-Registration** Experience in iii Roads. Has Worked with KeNHA for over 2 years. iv Holds a Degree in Electrical Engineering or its i equivalent from an institution recognized by EBK. Trainee 2 Registered or awaiting Registration as a Graduate ii 25,000.00 Engineer/Intern Electrical Engineer with EBK. Fresh Graduate from University. iii **Civil Engineering Diploma Holders Gross Monthly** Renumeration S/n **Staff Designation Minimum Qualifications** (Man Months) (KShs) i Holds a Diploma in Electrical Engineering -Has over 3 Years Post Graduation Practical ii 1 Inspector 71,500.00 Experience in Street Lighting. Has worked with KeNHA for over 2 years. iii **Surveyors Gross Monthly** Renumeration S/n **Staff Designation Minimum Qualifications** (Man Months) (KShs) i Holds a Degree in Survey or its equivalent ii Registered as a Graduate Member with the Institute Surveyor 117,500.00 of Survey of Kenya Has over 3 Years of Practical Experience in Roads. ii Holds a Degree/Diploma in Survey or its Assistant equivalent 71,500.00 Surveyor/Leveller ii Fresh from college Has over 1 year of practical experience in roads 3 Chainman 36,500.00 survey

2. NON-TECHNICAL STAFF

Administration

S/n	Staff Designation	Minimum Qualifications	Gross Monthly Renumeration (Man Months) (KShs)
1	Project Administrator	 i Holds a Bachelor's Degree in Business Administration (Human Resource Management) or its equivalent. ii Has worked with KeNHA for over 2 years. 	117,500.00
2	Asst. ICT officer	 i Holds a Diploma in Computer Science, Information Technology or other relevant and equivalent qualifications from a recognized Institution ii Has worked with KeNHA for over 1 Year 	52,500.00
Office	Assistant		
1	Office Assistant/Clerks	i Has O-Level Certificate or its equivalent.ii Trained on data keeping and/or computer applications.	36,500.00

APPENDIX I	3			
KeNHA RE's	OFFICE MISCELLANEOUS EX	XPENSES		
1.				
Stationaries				
<u>&</u>				
Consumable				
<u>s</u>				
NO.	DESCRIPTION	UNIT	Quantity	
1	A3 Photocopy Papers (White)	Reams	6	
2	A4 Photocopy Papers (White)	Reams	50	
3	A4 Photocopy Papers (Colored)	Reams	10	
4	Paper Conqueror Laid A4 (Blue,	Reams	10	
	Cream)			
5	Uni-ball pens (Blue/Black)	Pkt.	3	
6	Quality Envelopes (A4)	9gsm	14	
7	Quality Envelopes (A3)	90gsm	5	
8	Stapler Pin Removers	No.	5	
9	Binder clips (medium, Large)	Pkt	10	
10	Binding Spirals (8mm)	Pkt	10	
11	Binding spirals (10mm)	Pkt	10	
12	Binding Spirals (16mm)	Pkt	10	
13	Binding Spirals (32mm)	Pkt	10	
14	Bindind Spirals (51 mm)	Pkt	10	
15	Highlighters	No.	30	
16	Marker Pens	No.	10	
17	Stick Notes	No	100	
18	Short Hand Note Books -A6	No.	50	
19	Biro Pens Sharp Pointed- Black	No.	50	
20	Biro Pens Sharp Pointed Blue	No.	50	
21	Biro Pens Sharp Pointed Red	No.	50	
22	Box File Medium (PVC)	No.	10	
23	Envelopes Brown Size 4.3 X 8.7 Inch	No.	30	
24	Envelopes Brown - A3	No.	100	
25	Envelopes Brown-A4	No.	100	
26	Envelopes Brown-A5	No.	100	
27	Highlighting Pens	No.	10	
28	Paper Punch Giant	No.	1	
29	Stamp ink	No.	5	
30	Short Hand Note Books - A5	No.	100	
31	Staple Pins 24/6	Pkts	50	
32	Staple Pins Giant	Pkts	10	
33	Transparent Folders	No.	100	
34	Paper Clips 28mm	No.	500	
35	Stamp Pad Ink (Blue & Red)	No.	2	
36	White Out	No.	20	

37	Cello tape 1 inch	No.	10	
38	Embossed Covers (Blue &	Reams	5	
	Green)			
39	Binder Clips (2 " * 51mm)	Pkts	10	
40	Clear Pocket Folder	pcs	50	
41	Glue Stick Pritt	No.	5	
42	Pencils	No.	100	
43	Delivery Book	No.	5	
44	Stick notes (Sign here)	No.	50	
45	Toner For Heavy Duty	No.	5	
	Photocopier - Kyocera TA			
	2551ci			
46	Maintenance of office printers	SUM	3	
	and computers			
47	Uninterrupted Power Supply	No.	8	
48	Hp Laptop Computer (Core i7,	No.	2	
	3.9Ghz, 1TBHDD, 8GB			
	RAM,14 inch screen)			
49	HP Elite Desktop Computer,	No.	2	
	Intel Quad-Core i7 up to 3.9Ghz			
	CPU, 8GB RAM, 1TB,			
	Windows 10 Professional			
50	Office Electricity Bill	SUM	24	
51	Safety Boots	No.	5	
52	Safety Helmet	No.	10	
2. Staff	-	-	-	
Wellfare	Determents	T a4	1	
2	Detergents Manager and basin	Lot	20	
3	Moper and basin Air freshner	No.		
		No.	20	
4	Serviettes Airtima for stoff	No.	40	
5	Airtime for staff	Months	6	
6	Tissue paper (500)	Dozen	50	
7 8	Hand Sanitizers (500) ml	No.	10	
8	Hand washing gels (Dettol) 250 ml	No.	20	
9	Refillable Drinking water	No.	100	
	(20LTS) Bottle			
	SubTotal A			
<u>3.</u>				
<u>Consumable</u>	-	=	-	
s and				
Allowances				
4. Tools & Ean	iptment			
4. Tools & Equ		DCS	1	
4. Tools & Equ	Clamp Meter- Fluke 376FC with iFlex, True-RMS	pcs	1	

	GRAND TOTAL CARRIED FO	1,711,450.00			
	SubTotal B	ODWADI		TEM 01 01 00	530,000.00
7	Go Pro Hero9 (action camera)	No.	1	150,000.00	150,000.00
6	Mobile Radio/Patrol Walkie Talkie	No.	2	60,000.00	120,000.00
5	Megger Insulation Tester, 100 Gigaohms Resistance measuring 50V-1000V	No.	1		
4	Dr.Meter 1330B-V Digital Illuminance/Light Meter, 0- 200,000 Lux Luxmeter Digital Insulation Resistance Tester DCV ACV Meter Megohmmeter Meter VC60B+ with Unit Symbol Display	pcs	1		

SECTION VIII - DRAWINGS

SECTION VIII - DRAWINGS

Standard Drawings

Line Diagram

Line Diagram

TENDER NAME: PERFORMANCE BASED CONTRACT FOR THE MAINTENANCE OF STREET LIGHTING ON ATHI RIVER - BISIL (A2) ROAD

LINE DIAGRAM

	CHAINAGE (KM)							REMARKS	
Description	00	01	02	03	04	05	06	07	NB: Distances estimated to whole KMs
Bill 1: Preliminaries and General Items									
Publicity Sign									2 KM
Vehicle									8 KM
Miscellaneous									8 KM
Payment of RE's staff									8 KM
Bill 20: Rehabilitation Works									
High Mast Installation									2 KM
High Mast Fitting installation									2 KM
Tunnel Lights Installation									1 KM
Control Pillar Installation									2 KM
Concrete Case Cover Installation									2 KM
Single Arm Pole Installation									8 KM
Double Arm Pole Installation									4 KM
Pole Removal & Repair									1 KM
Integrated Solar Module Installation									8 KM
Гree Pruning									2 KM
Payment of Electricity Bills									2 KM
Bill 26: Performance Maintenance									
Performance Maintenance									8 KM

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PART 3 – CONDIT	IONS OF CONTRA	CT AND CONTRACT F	ORMS

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SECTION IX CONDITIONS OF CONTRACT PART I: GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract Part 1 – General Conditions shall be those forming Part 1 of the Conditions of Contract for works of Civil Engineering Construction Fourth Edition 1987, reprinted in 1992 with further amendments, prepared by the Federation Internationale des Ingenieurs Conseils (FIDIC)

Copies of the FIDIC Conditions of Contract can be obtained from:

FIDIC Secretariat

P.O. Box 86

1000 Lausanne 12

Switzerland

Fax: 41 21 653 5432

Telephone: 41 21 653 5003

SECTION X - CONDITIONS OF CONTRACT PART II -CONDITIONS OF PARTICULAR APPLICATION

SECTION X: CONDITIONS OF CONTRACT PART II: (CONDITIONS OF PARTICULAR APPLICATION)

The following Conditions of Particular Application shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The Particular Condition is preceded by the corresponding clause number of the General Conditions to which it relates.

CONTENTS

```
CONDITIONS OF CONTRACT PART II (CONDITIONS OF PARTICULAR APPLICATION)
     191SUBCLAUSE 1.1 – DEFINITIONS
                                   191SUBCLAUSE 2.1 - ENGINEER'S DUTIES AND
               191SUBCLAUSE 5.1 - LANGUAGE AND LAW 191SUBCLAUSE 5.2 -
AUTHORITY.
PRIORITY OF CONTRACT DOCUMENTS
                                   192SUBCLAUSE 10.1 - PERFORMANCE
SECURITY 192SUBCLAUSE 10.2 - VALIDITY OF PERFORMANCE SECURITY
     192SUBCLAUSE 10. 3 - CLAIMS UNDER PERFORMANCE SECURITY 193SUBCLAUSE
10.4 - COST OF PERFORMANCE SECURITY 193SUBCLAUSE 11.1 - INSPECTION OF SITE
     193SUBCLAUSE 11.2 - ACCESS TO DATA
                                        193SUBCLAUSE 14.1 PROGRAM TO BE
SUBMITTED
               194SUBCLAUSE 14.3- CASH FLOW ESTIMATE
                                                        195SUBCLAUSE 15.1-
CONTRACTOR'S SUPERINTENDENCE
                                   195SUBCLAUSE 15.2- LANGUAGE ABILITY AND
OUALIFICATIONS OF CONTRACTOR'S AUTHORISED AGENT 195SUBCLAUSE 16.2-
ENGINEER AT LIBERTY TO OBJECT 195SUBCLAUSE 16.3- QUALIFICATION AND
LANGUAGE ABILITY OF SUPERINTENDING STAFF
                                              196SUBCLAUSE 16.4 -
EMPLOYMENT OF LOCAL PERSONNEL
                                   196SUBCLAUSE 19.1- SAFETY, SECURITY AND
PROTECTION OF THE ENVIRONMENT
                                   196SUBCLAUSE 20.4 - EMPLOYERS RISKS
     197SUBCLAUSE 21.1 - INSURANCE OF WORKS AND CONTRACTOR 'S EQUIPMENT
     197SUBCLAUSE 21.2 – SCOPE OF COVER
                                        198SUBCLAUSE 21.4 - EXCLUSIONS
     198SUBCLAUSE 23.2 – MINIMUM AMOUNT OF INSURANCE
                                                        198SUBCLAUSE 25.1 -
EVIDENCE AND TERMS 198SUBCLAUSE 25.6 – INSURANCE NOTICES
                                                             199SUBCLAUSE
25.7 – NOTIFICATION TO INSURERS 199SUBCLAUSE 28.2 – ROYALTIES
                                                             199SUBCLAUSE
29.1 – INTERFERENCE WITH TRAFFIC
                                   199SUBCLAUSE 29.2 - REINSTATEMENT AND
COMPENSATION FOR DAMAGES TO PERSONS AND PROPERTY
                                                        199SUBCLAUSE 34.2 –
CONDITIONS OF EMPLOYMENT OF LABOUR
                                         200SUBCLAUSE 34.3 - FAIR WAGES
     200SUBCLAUSE 34.4 – BREACH OF FAIR WAGES CLAUSE
                                                        201SUBCLAUSE 34.5 -
RECRUITMENT OF UNSKILLED LABOUR 201SUBCLAUSE 34.6 - COMPENSATION FOR
          201SUBCLAUSE 34.7 – LABOUR STANDARDS
                                                   201SUBCLAUSE 35.2 -
RECORDS OF SAFETY AND HEALTH 202SUBCLAUSE 35.3 - REPORTING OF ACCIDENTS
     202SUBCLAUSE 41.1 – COMMENCEMENT OF WORKS
                                                   202SUBCLAUSE 44.1 -
EXTENSION OF TIME FOR COMPLETION 203SUBCLAUSE 45.1 – RESTRICTION ON
WORKING HOURS 203 SUBCLAUSE 47.2 – REDUCTION OF LIQUIDATED DAMAGES
     203SUBCLAUSE 52.1 – VALUATION AND VARIATIONS
                                                   204SUBCLAUSE 52.4 -
               205SUBCLAUSE 54.1 - CONTROCTOR'S EQUIPMENT, TEMPORARY
DAYWORKS
                         205SUBCLAUSE 55.2 – OMMISIONS OF OUANTITIES
WORKS AND MATERIALS
     206SUBCLAUSE 58.4 - PROVISIONAL ITEMS 206SUBCLAUSE 60.1 - MONTHLY
               206SUBCLAUSE 60.2 INTERIM PAYMENT CERTIFICATE 206SUBCLAUSE
STATEMENT
60.3 - PAYMENT OF RETENTION MONEY 207SUBCLAUSE 60.4- CORRECTION OF
               207SUBCLAUSE 60.5- STATEMENT AT COMPLETION
60.6 – FINAL STATEMENT
                         208SUBCLAUSE 60.7- DISCHARGE
                                                        208SUBCLAUSE 60.8 -
FINAL PAYMENT CERTIFICATE
                              208SUBCLAUSE 60.9- CESSATION OF EMPLOYERS
LIABILITY 209SUBCLAUSE 60.10 – TIME FOR PAYMENT
                                                   209SUBCLAUSE 60.11 -
CURRENCY OF PAYMENT
                         209SUBCLAUSE 60.12 - ADVANCE PAYMENT
     210SUBCLAUSE 60.13 MATERIALS FOR PERMANENT WORKS 210SUBCLAUSE 67.1 -
ENGINEER'S DECISION 212SUBCLAUSE 67.2 – AMICABLE SETTLEMENT 212SUBCLAUSE
67.3 – ADJUDICATION 213SUBCLAUSE 67.3 – ARBITRATION 213SUBCLAUSE 68.2 –
NOTICES TO EMPLOYER AND ENGINEER 213CLAUSE 69 – DEFAULT OF EMPLOYER
     214CLAUSE 70 - CHANGES IN COST AND LEGISLATION 214CLAUSE 72 - RATES OF
```

EXCHANGE COST 214CLAUSE 73 – BRIBERY AND COLLUSION215CLAUSE 74 – CONTRACT CONFIDENTIAL 215

CONDITIONS OF CONTRACT PART II (CONDITIONS OF PARTICULAR APPLICATION)

SUBCLAUSE 1.1 – DEFINITIONS

Amend this sub-clause as follows:

- (i) The "Employer" is the Kenya National Highways Authority, represented by the Director General Kenya national Highways Authority.
- (iv) The "Engineer" is the Director Road Asset and Corridor Management Kenya National Highways Authority.
 - (v) The "Engineer Representative" is the Deputy Director Corridor Management A
- (b) (i) Insert in line 2 after the Bills of Quantities", the following, "the rates entered by the Contractor (whether or not such rate be employed in computation of the Contract Price),"

Amend subparagraph (b) (v) of Sub-Clause 1.1 by adding the following words at the end:

The word "Tender" is synonymous with "bid" and the word "Appendix to Tender" with "Appendix to Bid" and the word "Tender documents" with "bidding documents".

Add the following at the end of this sub-clause:

(h) (i) "Materials" means materials and other things intended to form or forming part of the Permanent Works.

SUBCLAUSE 2.1 - ENGINEER'S DUTIES AND AUTHORITY.

With reference to Sub-Clause 2.1 (b), the following shall also apply: The Engineer shall obtain the specific approval of the Employer before taking any of the following actions specified in Part 1:

- (a) Consenting to the subletting of any part of the works under Clause 4;
- (b) Certifying additional cost determined under Clause 12;
- (c) Determining an extension of time under Clause 44;
- (d) Issuing a variation under Clause 51;
- (e) Fixing rates or prices under Clause 52
- (f) The works specified under this Contract shall be executed, supervised and evaluated in accordance to the Contract Supervision and Evaluation Manual developed by the Ministry of Roads Version 2012

SUBCLAUSE 5.1 - LANGUAGE AND LAW

The Contract document shall be drawn up in the ENGLISH LANGUAGE. Communication between the Contractor and the Engineer's Representative shall be in this given language.

The Laws applicable to this Contract shall be the Laws of the Republic of Kenya.

SUBCLAUSE 5.2 – PRIORITY OF CONTRACT DOCUMENTS

Delete the documents listed 1-6 and substitute:

- (1) The Contract Agreement (if completed)
- (2) The Letter of Acceptance;
- (3) The Bid and Appendix to Bid;
- (4) The Conditions of Contract Part II;
- (5) The Conditions of Contract Part I;
- (6) The Special Specifications;
- (7) The Standard Specification for Road and Bridge Construction, 1986;
- (8) The PBC Guidelines Edition 1.1 of February;
- (9) Road Maintenance Manual, May 2010 Edition and Performance Based Contract Manuals.
- (10) The Drawings;
- (11) The priced Bills of Quantities
- (12) Other documents as listed in the Appendix to form of Bid

SUBCLAUSE 8.2 - Site Operations and Method of Construction

Add

The Contract may be terminated if the Contractor is unable to take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction.

SUBCLAUSE 10.1 - PERFORMANCE SECURITY

Replace the text of Sub-clause 10.1 with the following:

"The Contractor shall provide security for his proper performance of the Contract within 14 days after receipt of the Letter of Acceptance. The Performance Security shall be in the form of a bank guarantee as stipulated by the Employer in the Appendix to Bid. The Performance Security shall be issued by a bank incorporated in Kenya. The Contractor shall notify the Engineer when providing the Performance Security to the Employer.

"Without limitation to the provisions of the preceding paragraph, whenever the Employer determines an addition to the Contract Price as a result of a change in cost, the Contractor, at the Engineers written request, shall promptly increase the value of the Performance Security by an equal percentage.

SUBCLAUSE 10.2 - VALIDITY OF PERFORMANCE SECURITY

The Performance Security shall be valid until a date 28 days after the date of issue of the Defects Liability Certificate. The security shall be returned to the Contractor within 14 days of expiration.

Add

The Resident Engineer shall provide a 28days Notice to the Contractor informing him of the early expiry of his Performance Security. Upon receipt of such a Notice the Contractor shall before lapse of 14days extend the Performance security and provide evidence of such an extension to the Resident Engineer. Failure by the contractor to renew his performance Security 7 days to its expiry the resident Engineer will Request the Engineer to redeem it. Such a request shall be handled immediately and the performance security recovered.

SUB CLAUSE 10. 3 - CLAIMS UNDER PERFORMANCE SECURITY

Delete the entire sub-clause 10.3.

The Employer shall be at liberty to claim part or the entire performance Security without informing or notifying the Contractor provided that the conditions necessitating the claim are contractual.

ADD NEW SUBCLAUSE;

'SUBCLAUSE 10. 4 - COST OF PERFORMANCE SECURITY

The cost of complying with the requirements of this clause shall be borne by the Contractor.'

SUB CLAUSE 11. 1 - INSPECTION OF SITE

In line 17 after "affect his Tender" add

"and the Contractor shall be deemed to have based his BID on all the aforementioned"

Delete the last paragraph completely and replace with the following:

"The Employer in no way guarantees completeness nor accuracy of the soil, materials, subsurface and hydrological information made available to the Contractor at the time of bidding or at any other time during the period of the Contract, and the Contractor shall be responsible for ascertaining for himself all information as aforesaid for the execution of works and his BID shall be deemed to have been priced accordingly.

ADD A NEW SUBCLAUSE;

'SUBCLAUSE 11.2 - ACCESS TO DATA

Data made available by the Employer in accordance with Clause 11.1 shall be deemed to include data listed elsewhere in the Contract as open for inspection at the address stipulated in the Appendix to Bid.'

SUBCLAUSE 14.1 PROGRAM TO BE SUBMITTED

The time within which the program shall be submitted shall be as specified in the Appendix to the Form of Bid.

This detailed program shall be based upon the program submitted by the Contractor as part of his BID, where this was required, and shall in no material manner deviate from the said program.

The program shall be in the form of a Critical Path Method Network (CPM Network) showing the order of procedure and a description of the construction methods and arrangements by which the Contractor proposes to carry out the works. It should also be supplemented by a time –bar chart of the same program. The program shall be coordinated with climatic, groundwater and other conditions to provide for completion of the works in the order and by the time specified. The program shall be revised at three-month intervals and should include a chart of the principle quantities of work forecast for execution monthly.

The Contractor shall submit to the Engineer not later than the day or date mentioned in the Appendix to the Form of Bid, a general description of his proposed arrangements and methods for the execution of the Works, including temporary offices, buildings, access roads, construction plant and its intended production output, working shift arrangements, labour strength, skilled and unskilled, supervision arrangements, power supply arrangements, supply of materials including a materials utilization program, stone crushing, aggregate production and storage, cement handling, concrete mixing and handling, methods of excavation, dealing with water, testing methods and facilities.

During the execution of the works, the Contractor shall submit to the Engineer full and detailed particulars of any proposed amendments to the arrangements and methods submitted in accordance with the foregoing.

If details of the Contractors proposals for Temporary Works are required by the Engineer for his own information the Contractor shall submit such details within fourteen days of being requested to do so.

The Resident Engineer may at his discretion provide to the Contractor a Format of submitting the Program of Works to comply with the Cash flow projections and budgets assigned to the project

The various operations pertaining to the works shall be carried out in such a progressive sequence as will achieve a continuous and consecutive output of fully completed roadworks inclusive of all bridge works and culverts within the time limits specified in the Contract. Generally, the Contractor shall start at one end of the road and progress continuously towards the other without leaving any isolated section or sections of uncompleted road provided that the site of the works has been acquired in its entirety and the encumbrances and services thereon removed.

The Contractor shall allow in his programme all published Kenya public holidays including but not limited to the following per calendar year during which the Contractor shall not be permitted to work.

- New Year's Day (1st January)
- Good Friday
- Easter Monday
- Labour day (1st May)
- Madaraka Day (1st June)
- Idd Ul Fitr
- Utamaduni Day (10th October)
- Mashujaa Day (20th October)
- Jamhuri day (12th December)

- Christmas Day (25th December)
- Boxing day (26th December)

The Contractor shall also allow per calendar year for a further 2 unspecified public holidays which may be announced by the Government of Kenya with no prior notification upon which he shall not be permitted to work.

SUBCLAUSE 14.2- REVISED PROGRAMME

Add at the end of the first paragraph;

'Failure by the Contractor to submit the Revised Work Program in the prescribed format and within the stipulated period shall be considered a violation of his contractual obligations and a Notice for Termination shall be issued to the Contractor.'

SUBCLAUSE 14.3- CASHFLOW ESTIMATE

The time within which the detailed cash flow estimate shall be submitted shall be as specified in the Appendix to the Form of Bid.

SUBCLAUSE 15.1- CONTRACTOR'S SUPERINTENDENCE

Add the following at the end of the first paragraph of sub-clause 15.1:

"The Contractor shall, within Fourteen (14) days of receipt of the Engineer's order to commence the works inform the Engineer in writing the name of the Contractor's Representative and the anticipated date of his arrival on site. The Contractor shall also submit a specimen signature of his proposed Site Agent /Road Manager who **SHALL** be the only signatory to payment of certificates/Monthly statements from the Contractor."

Add the following Sub-clause 15.2

SUBCLAUSE 15.2- LANGUAGE ABILITY AND QUALIFICATIONS OF CONTRACTOR'S AUTHORISED AGENT

Unless otherwise stated in the tender document, the Contractor's Agent or Representative on the site shall have a minimum qualification of a Registered Graduate Engineer, BSc in Electrical Engineering and shall be able to read and write English fluently.

The Contractor's Agent or Representative shall have at least 5 years relevant experience as a Site Agent.

SUBCLAUSE 16.2- ENGINEER AT LIBERTY TO OBJECT

At the end of this Clause add

"by a competent substitute approved by the Engineer and at the Contractors own expense."

Add the following Sub-Clauses 16.3 and 16.4:

ADD THE FOLLOWING SUB-CLAUSE

SUBCLAUSE 16.3- QUALIFICATION AND LANGUAGE ABILITY OF SUPERINTENDING STAFF

Unless otherwise stated in the Tender document, the Contractor's superintending staff shall meet the following minimum qualifications:

Should have a working knowledge of English or Kiswahili. Should any of the superintending staff not be able to meet this condition, the Contractor shall propose to the Engineer arrangements for provision of a sufficient number of interpreters of approved qualifications. The Engineer, at his discretion, may amend, approve or reject such arrangements or reject deployment of superintending staff not meeting the language requirements. The Engineer may at any time during the duration of the Contract amend any approved arrangements made for interpreters, which shall be implemented at the Contractors expense.

The key staff must have qualifications stated in Sub Clause 15.2.

SUBCLAUSE 16.4 – EMPLOYMENT OF LOCAL PERSONNEL

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience who are Kenya citizens.

SUBCLAUSE 19.1- SAFETY, SECURITY AND PROTECTION OF THE ENVIRONMENT

Add Sub-Clause-paragraph (d) of Sub-Clause 19 as follows:

Notwithstanding the Contractor's obligation under Sub-Clause-paragraph (a), (b) and 9(c) of Sub-Clause 19.1 of the Conditions of Contract, the Contractor shall observe the following measures with a view to reducing or elimination adverse environmental effects by the site works:

- (i) All quarries and borrow pits shall be filled and landscaped to their original state after extraction of construction material
- (ii) Soil erosion due to surface runoff or water from culverts or other drainage structures should be avoided by putting in place proper erosion control measures that shall include, but are not limited to grassing and planting if trees
- (iii) Long traffic diversion roads shall be avoided so as to minimize the effect of dust on the surrounding environment. In any case all diversions shall be kept damp and dust free
- (iv) Spillage of oils, fuels and lubricants shall be avoided and if spilt, shall be collected and disposed of in such a way as not to adversely affect the environment
- (v) Rock blasting near settlement areas shall be properly coordinated with the relevant officers of the Government so as to minimize noise pollution and community interference.

Add Paragraph (e) of Sub-Clause 19.1 as follows:

- e). Notwithstanding the Contractor's obligation under Sub-Clause-paragraph (a), (b) and (c) of Sub-Clause 19.1 of the Conditions of Contract, the Contractor shall observe the following measures with a view to enhance Road Safety to the Road Users and Site Workers:
- vi. Prepare and submit a comprehensive Road Safety Implementation Plan within 14 days after receipt of Order to commence for the Engineer's Approval. The plan shall include but not limited to the following:
 - Night driving
 - Safety of workers
 - Diversions
 - Traffic management Plan
 - Towing of stalled vehicle
- vii. The Contractor should identify, evaluate and monitor potential traffic and road safety risks to workers and road users throughout the Contract life cycle and develop measures and plans to address them.
- viii. The Contractor shall install and maintain standard approved traffic warning signs, directional signs, secure the working areas and deploy flagmen at active construction sites.
 - ix. The Contractor shall assess each phase of the works, monitor incidents and accidents indicating the mitigation measures undertaken and prepare monthly reports to be submitted to the Resident Engineer.
 - x. The Contractor shall factor the cost of implementation of the Road Safety Plan in the rates for the Works.

Failure by the Contractor to observe the above safety features shall be deemed to be a violation of the Contractor's Obligations and shall be grounds for Suspension and/or Termination.

SUBCLAUSE 20.4 - EMPLOYERS RISKS

Delete Sub-Clause (h) and substitute with;

- (h) any operation of the forces of nature (insofar as it occurs on site) which an experienced contractor:
 - (i) could not have reasonably foreseen, or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:
 - (A) prevent loss or damage to physical property from occurring by taking appropriate measures or
 - (B) insure against such loss or damage

SUBCLAUSE 21.1 - INSURANCE OF WORKS AND CONTRACTOR'S EQUIPMENT

Delete the first sentence of this Clause and replace with the following:

"prior to commencement of the Works the Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20, insure to the satisfaction of the Employer:"

Add the following words at the end of Sub-paragraph (a) and immediately before the last word of Sub-paragraph (b) of Sub-Clause 21.1:

"It being understood that such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred"

SUBCLAUSE 21.2 – SCOPE OF COVER

Amend sub-paragraph (a) of Sub-Clause 21.2 as follows:

Delete words "from the start of work at the site" and substitute the words "from the first working day after the Commencement Date"

Add the following as Sub-Clause (c) under Sub-Clause-Clause 21.2

(c) It shall be the responsibility of the Contractor to notify the insurance company of any change in the nature and extent of the Works and to ensure the adequacy of the insurance coverage at all times during the period of the Contract.

Add

The Contractor shall be expected to insure all road assets from damage and to pursue the insurance companies as and when damages to these assets occur. In addition, the Contractor is expected to furnish the Engineer with a copy of Insurance Policy of WIBA at the commencement of works.

SUBCLAUSE 21.4 - EXCLUSIONS

Amend Sub-Clause 21.4 to read as follows:

"There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by the risks listed under Sub-Clause 20.4 sub-paragraph (a) (i) to(iv) of the Conditions of Particular Application."

SUBCLAUSE 23.2 – MINIMUM AMOUNT OF INSURANCE

Add the following at the end of this Clause:

".. with no limits to the number of occurrences".

SUBCLAUSE 25.1 – EVIDENCE AND TERMS

Amend Sub-Clause OF INSURANCE 25.1 as follows:

Insert the words "as soon as practicable after the respective insurances have been taken out but, in any case," before the words "prior to the start of work at the site"

Add the following Sub-Clauses 25.5, 25.6

SUBCLAUSE 25.5 – INSURANCE NOTICES

Each policy of insurance effected by the Contractor for purposes of the Contract shall include a provision to the effect that the Insurer shall have a duty to give notice in writing to the Contractor and Employer of the date when a premium becomes payable. This shall not be more than thirty (30) days before that date and the policy shall remain in force until thirty (30) days after the giving of such notice.

SUBCLAUSE 25.6 – NOTIFICATION TO INSURERS

It shall be the responsibility of the Contractor to notify insurers under any of the insurance referred to in the preceding clauses 21, 23 and 24 on any matter or event, which by the terms of such insurance are required to be so notified. The Contractor shall indemnify and keep indemnified the Employer against all losses, claims, demands, proceedings, costs, charges and expenses whatsoever arising out of or in consequence of any default by the Contractor in complying with the requirements of this Sub-Clause whether as a result of avoidance of such insurance or otherwise.

SUBCLAUSE 28.2 – ROYALTIES

Add at the end of this Sub-Clause the following sentence:

"The Contractor shall also be liable for all payments or compensation if any that are levied in connection with the dumping of part or all of any such material."

Add

The Contractor shall be solely responsible for any Cess and any other fees that the County/Region May levy on materials, goods or transportation within the Region

SUBCLAUSE 29.1 – INTERFERENCE WITH TRAFFIC

Supplement Sub-Clause 29.1 by adding the following sentence at the end:

"The Contractor will be permitted to use existing public roads for access to the site. The Contractor shall pay vehicle license tax and road maintenance duty in accordance with relevant regulations and shall obtain any necessary permits or licenses from relevant authorities for transporting his equipment."

Add the following subclause 29.2:

SUBCLAUSE 29.2 – REINSTATEMENT AND COMPENSATION FOR DAMAGES TO PERSONS AND PROPERTY

The Contractor shall reinstate all properties whether public or private which are damaged in consequence of the construction and, maintenance of the works to a condition as specified and at least equal to that prevailing before his first entry on them.

If in the opinion of the Engineer the Contractor shall have failed to take reasonable and prompt action to discharge his obligations in the matter of reinstatement, the Engineer will inform the Contractor in writing of his opinion, in which circumstances the Employer reserves the right to employ others to do the necessary work of reinstatement and to deduct the cost thereof from any money due or which shall become due to the Contractor.

The Contractor shall refer to the Employer without delay all claims which may be considered to fall within the provisions of Clause 22.1.

Add the following Sub-Clause 34.2 to 34.8

SUBCLAUSE 34.2 – CONDITIONS OF EMPLOYMENT OF LABOUR

The Contractor shall be responsible for making all arrangements for and shall bear all costs relating to recruitment, obtaining of all necessary visas, permits or other official permission for movements of staff and labour.

SUBCLAUSE 34.3 – FAIR WAGES

The Contractor shall, in respect of all persons employed anywhere by him in the execution of the Contract, and further in respect of all persons employed by him otherwise than in the execution of the Contract in every factory, Workshop or place occupied or used by him for the execution of the Contract, observe and fulfil the following conditions:

- (a) The Contractor shall pay rates of wages, observe hours of labour and provide conditions of labour, housing, amenities and facilities not less favourable than those required by the latest Regulation of Wages (Building and Construction Industry) Order as of the time of bid submission, and subsequent amendments thereto, or in any wage scales, hours of work or conditions agreed by the Ministry of Labour or other Government Department in consultation with the appropriate wage fixing authority and generally recognized by other employees in the district whose general circumstances in the trade or industry in which the Contractor is engaged are similar.
- (b) In the absence of any rates of wages, hours or conditions of labour so established the Contractor shall pay rates of wages and observe hours and conditions of labour which are not less favourable than the general level of wages, hours and conditions observed by other Employers whose general circumstances in the trade or industry in which the Contractor is engaged are similar.
- (c) Where the absence of established rates of wages, hours and conditions of labour or the dissimilarity of the general circumstances in the trade of industry in which the Contractor is engaged prevent the Contractor from observing rates of wages, hours and conditions of labour ascertained under sub-paragraph (a) and (b) above the Contractor in fixing the rates of wages, hours and conditions of labour of his employees shall be guided by the advice of the Labour Department.
- (d) The Contractor shall recognize the freedom of his employees to be members of trade unions.

- (e) The Contractor shall maintain records in English of the time worked by, and the wages paid to, his employees. The Contractor shall furnish to the Engineer or Employer, if called upon to do so, such particulars of the rates, wages and conditions of labour as the Employer or Engineer may direct.
- (f) The Contractor shall at all times during the continuance of the contract display, for the information of his employees in every factory, workshop or place occupied or used by him for the execution of the Contract, a copy of this clause together with a notice setting out the general rates of wages, hours and conditions of labour of his employees.
- (g) The Contractor shall be responsible for the observance of this clause by sub-Contractors employed in the execution of the works.
- (h) The contractor shall pay wages to REs staff within five days after the end of the month in which the wages become due and remit statutory deductions within the period stipulated under applicable law.

SUBCLAUSE 34.4 – BREACH OF FAIR WAGES CLAUSE

Any Contractor or Sub-Contractor who is found to be in breach of Fair Wages Clause shall cease to be approved as a Contractor or Sub-Contractor for such period as the Permanent Secretary for the Ministry of Transport and Infrastructure may determine.

Should a claim be made to the Employer alleging the Contractor's default in payment of Fair Wages of any workman employed on the Contract and if proof thereof satisfactory to the Employer is furnished by the Labour Authority, the Employer may, failing payment by the Contractor, pay the claims out of any monies due or which may become due to the Contractor under the Contract.

For breach of sub Clause 34.3 (h), penalties shall apply at a rate and limit as specified in the Appendix to Form of Bid

SUBCLAUSE 34.5 – RECRUITMENT OF UNSKILLED LABOUR

Any additional unskilled labour which is required by the Contractor for the works and which is not in his employ at the time of the acceptance of the BID shall be recruited by the Contractor from the Labour Exchange or Exchange or Exchanges nearest to the site or sites of the work.

SUBCLAUSE 34.6 – COMPENSATION FOR INJURY

The Contractor shall in accordance with the Workmen's Compensation Act of the Laws of Kenya and any other regulations in force from time to time pay compensation for loss or damage suffered in consequence of any accident or injury or disease resulting from his work to any workman or other person in the employment of the Contractor or any Subcontractor.

SUBCLAUSE 34.7 – LABOUR STANDARDS

- (a) the Contractor shall comply with the existing local labour laws, regulations and labour standards
- (b) the Contractor shall formulate and enforce an adequate safety program with respect to all work under his contract, whether performed by the Contractor or subcontractor. The Contractor has assurance from the Employer of cooperation where the implementation of these safety measures requires joint cooperation.
- (c) Upon written request of the Employer the Contractor shall remove or replace any of his employees employed under this Contract.

Add the following Sub-Clause 35.2 and 35.3.

SUBCLAUSE 35.2 – RECORDS OF SAFETY AND HEALTH

The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

SUBCLAUSE 35.3 – REPORTING OF ACCIDENTS

The Contractor shall report to the Engineer details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer immediately by the quickest available means. The Contractor shall also notify the relevant authority whenever the Laws of Kenya require such a report.

SUBCLAUSE 36.1 – MATERIALS, PLANT AND WORKMANSHIP

Add at the end of Sub-Clause 36.1 the following:

Failure by the Contractor to observe and control quality of the works shall be deemed to be a violation of the Contractor's Obligations and shall be grounds for Suspension of works and/or Termination of Contract.

The Contractor shall submit to the Engineer, Project Specific Quality Management Plan for approval 14 days after issuance of order to commence. The Plan shall include but not limited to:

- 1. Key staff that will be involved in the project and their role in quality management
- 2. Resources (Human and machinery) and Resource allocation in quality management
- 3. Processes and procedures to be followed in quality management
- 4. Controls to be put in place to ensure that the quality management plan is adhered to.
- 5. Reporting methodology on quality Management
- 6. Methodology on inspection, testing, monitoring and measuring to ensure conformity to quality requirement in accordance with the contract.
- 7. Description on correction action to be undertaken on non-conforming outputs and corrective action to avoid recurrence.

SUBCLAUSE 41.1 – COMMENCEMENT OF WORKS

Amend Sub-Clause 41.1 as follows:

Delete the words "as soon as is reasonably possible" in the first sentence and replace with "within the period stated in the Appendix to Bid".

SUBCLAUSE 43.1 – TIME FOR COMPLETION

Amend Sub-Clause 43.1 as follows:

Delete the words "within the time" to "such extended time" and substitute "by the date or dates stated or implied in Clause 14 of these Conditions of Particular Application.

SUBCLAUSE 44.1 – EXTENSION OF TIME FOR COMPLETION

Add at the end of Sub-Clause 44.1 the following:

"Neither rains falling within the rainy seasons as occurs in Kenya nor floods caused by such rains shall be deemed exceptional weather conditions such as may fairly entitle the Contractor to an extension of time for the completion of the work."

SUBCLAUSE 45.1 – RESTRICTION ON WORKING HOURS

Add at the end of Sub-Clause 45.1 the following:

"If the Contractor requests permission to work by night as well as by day, then if the Engineer shall grant such permission the Contractor shall not be entitled to any additional payments for so doing. All such work at night shall be carried out without unreasonable noise or other disturbance and the Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbance created while or in carrying out night work and from and against all claims, demands, proceedings, costs, charges and expenses whatsoever in regard or in relation to such liability.

"In addition, the Contractor will be required to provide, for any work carried out at night or recognized days of rest, adequate lighting and other facilities so that the work is carried out safely and properly.

"In the event of the Engineer granting permission to the Contractor to work double or rotary shifts or on Sundays, the Contractor shall be required to meet any additional costs to the Employer in the administration and supervision of the Contract arising from the granting of this permission."

SUBCLAUSE 47.2 – REDUCTION OF LIQUIDATED DAMAGES

Add the following paragraphs at the end of this Sub-Clause:

"There shall be no reduction in the amount of liquidated damages in the event that a part or a section of the Works within the Contract is certified as completed before the whole of the Works comprising that Contract.

The Employer shall pay no bonus for early completion of the Works to the Contractor.

The sum stated in the Appendix to Bid as liquidated damages shall be increased by a sum equivalent to any additional amount payable by the Employer to the Contractor under clause 70.1 in respect of an increase in costs in such a period that would not have been incurred by the Contractor if the works had been completed by the due date for completion prescribed by Clause 43."

Add

The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to become due to the Contractor, and after the limit of deduction prescribed in the Appendix to tender is reached, the Contract shall be considered due for Termination.

SUBCLAUSE 48.3 – SUBSTANTIAL COMPLETION OF PARTS

In Hybrid PBC Works Contracts, when Instructed works are substantially completed, the same works shall be taken over and shall be considered complete.

SUBCLAUSE 49.1 – DEFECTS LIABILITY PERIOD

Defects liability period shall start for Instructed works immediately the works are certified as Complete by the Engineer. The period of Defects liability shall be prescribed in the Appendix to the Contract.

SUBCLAUSE 49.2 – COMPLETION OF OUTSTANDING WORK AND REMEDYING DEFECTS

Add

At the time of End of Defects Liability Inspection, no defect arising from the permanent works existing shall be acceptable for taking over. The Inspection team shall verify and satisfy themselves that all the outstanding works and defects arising out of the works have been attended to sufficiently. Routine Maintenance works/PBC Works shall also be inspected at the time of End of Defects Liability Inspection and should comply to the specifications of the PBC Works.

SUBCLAUSE 51.1 – VARIATIONS

Add the following at the end of the last paragraph

No such variations in any way shall contravene the requirements of Public Procurement and Disposal Act of 2015 and the amendments thereof.

SUBCLAUSE 52.1 – VALUATION AND VARIATIONS

Add new Clause 52.2(c)

No change in the unit rates or prices quoted shall be considered for items included in the schedule of Dayworks rates, or Provisional Sums and items, or for any item in the BOQ.

Add new clause 52.3

SUBCLAUSE 52.3 – VARIATIONS EXCEEDING 25 PERCENT

Subject to requirements of Public Procurement and Disposal Act of 2015 and the amendments thereof, variations above 25 percent critical to the proper function of the completed works and without which part or whole of already specified work in the bill of quantities cannot be adequately executed may constitute ground for Contract termination by either parties.

In which case, the Engineer shall give 28-day notice to the Contractor with a copy to the Employer of such occurrence. The Contract shall terminate at the expiry of the notice.

SUBCLAUSE 52.4 – DAYWORKS

Add the following at the end of Sub-Clause 52.4:

The work so ordered shall immediately become part of the works under the contract. The Contractor shall, as soon as practicable after receiving the Dayworks order from the Engineer undertake the necessary steps for due execution such work. Prior to commencement of any work to be done on a Dayworks basis, the Contractor shall give an advance notice to the Engineer stating the exact time of such commencement.

SUBCLAUSE 54.1 – CONTRACTOR'S EQUIPMENT, TEMPORARY WORKS AND MATERIALS : Exclusive use for the works

Amend Sub-Clause 54.1 as follows:

Line 5: add "written" between "the" and "consent".

Delete Sub-Clauses 54.2 and 54.5.

Add

The Contractor shall be at liberty to deliver and withdraw equipment as and when needed for the undertaking of works under this contract according to the equipment deployment schedule and work program approved. If a particular equipment is required and the contractor is unable at the required time to avail the said equipment, the contractor shall be expected to notify the Engineer of the possible reasons and adjustments made to such delays. No Provisions shall be made for any claims on Idle Equipment.

SUBCLAUSE 55.2 – OMMISIONS OF QUANTITIES

Items of Works described in the Bills of Quantities for which no rate or price has been entered in the Contract shall be considered as included in other rates and prices in the Contract and will not be paid for separately by the Employer.

Add the following Sub-Clause 58.4:

SUBCLAUSE 58.4 – PROVISIONAL ITEMS

Provisional items shall be read as Provisional Sums and shall be operated as such in accordance with Sub-Clauses 58.1 to 58.3.

Clause 60 of the General Conditions is deleted and substituted with the following: -

SUBCLAUSE 60.1 – MONTHLY STATEMENT

The Contractor shall submit a statement to the Engineer at the end of each month, in a tabulated form approved by the Engineer, showing the amounts to which, the Contractor considers himself to be entitled. The statement shall include the following items, as applicable;

- the value of the Permanent Work executed up to the end of previous month
- such an amount (not exceeding 75 percent of the value) as the Engineer may consider proper on account of materials for permanent work delivered by the Contractor in the site
- such amount as the Engineer may consider fair and reasonable for any Temporary Works for which separate amounts are provided in the Bill of Quantities
- adjustments under Clause 70
- any amount to be withheld under retention provisions of Sub-clause 60.3
- any other sum to which the Contractor may be entitled under the Contract

If the Engineer disagrees with or cannot verify any part of the statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes and corrections in the statement as may be directed by the Engineer. In cases where there is difference in opinion as to the value of any item, the Engineer's view shall prevail.

SUBCLAUSE 60.2 INTERIM PAYMENT CERTIFICATE

The Contractor shall forward to the Engineer an Interim Payment Certificate based on the statement as corrected above and, should it be necessary in the Engineers opinion, shall promptly make any further amendments and corrections to the Interim Payment Certificate.

The Engineer shall not unreasonably withhold certifying an Interim Payment Certificate and in case of likely delay in establishing the value of an item, such item may be set aside and the remainder certified for payment.

Within 45 days after receipt of the Interim Payment Certificate and subject to the Contractor having made such further amendments and corrections as the Engineer may require, the Engineer will forward to the Employer the certified Interim Payment Certificate.

Provided that the Engineer shall not be bound to certify any payment under this Clause if the net amount thereof, after all retentions and deductions, would be less than the minimum amount of Interim Payment Certificate's stated in the Appendix to Form of Bid. However, in such a case, the uncertified amount will be added to the next interim payment, and the cumulative unpaid certified amount will be compared to the minimum amount of interim payment.

SUBCLAUSE 60.3 – PAYMENT OF RETENTION MONEY

A retention amounting to the percentage stipulated in the Appendix to Bid shall be made by the Engineer in the first and following Interim Payment Certificates until the amount retained shall reach the "Limit of Retention Money" named in the Appendix to Form of BID.

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.

Provided that in the event of different Defects Liability Periods being applicable to different Sections of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability Period "Shall, for the purpose of this sub-clause, be deemed to mean the expiration of the latest of such periods.

Provided also that if at such time, there remain to be executed by the Contractor any work instructed, pursuant to Clause 49 and 50, in respect of the works, the Engineer shall be entitled to withhold certification until completion of any such work or so much of the balance of the Retention money as shall in the opinion of the Engineer, represents the cost of the remaining work to be executed.

SUBCLAUSE 60.4– CORRECTION OF CERTIFICATES

The Engineer may in any Interim Payment Certificate make any correction or modification to any previous Interim Payment Certificate signed by him and shall have authority, if any work is not being carried out to his satisfaction to omit or reduce the value of such work in any Interim Payment Certificate.

SUBCLAUSE 60.5- STATEMENT AT COMPLETION

Not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the works, the Contractor shall submit to the Engineer a statement at completion showing in detail, in a form approved by the Engineer;

The final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate.

Any further sums which the Contractor considers to be due; and

An estimate of amounts that the Contractor considers will become due to him under the Contract.

Estimate amounts shall be shown separately in the Statement at Completion. The Contractor shall amend and correct the Statement as directed by the Engineer and submit a Certificate at Completion to be processed as in Sub-Clause 60.2.

SUBCLAUSE 60.6 - FINAL STATEMENT

Not later than 56 days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62.1, the Contractor shall submit to the Engineer for consideration a draft final statement with supporting documents showing in detail, in the form approved by the Engineer;

The final value of all work done in accordance with the Contract;

Any further sums which the Contractor considers to be due to him.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be required.

SUBCLAUSE 60.7- DISCHARGE

Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment under the Final Payment Certificate issued pursuant to Sub-Clause 60.8 has been made and the Performance Security referred to in Sub-Clause 10.1 has been returned to the Contractor.

SUBCLAUSE 60.8 – FINAL PAYMENT CERTIFICATE

Upon acceptance of the Final Statement as given in Sub-Clause 60.6, the Engineer shall prepare a Final Payment Certificate which shall be delivered to the Contractor's authorized agent or representative for his signature. The Final Payment Certificate shall state:

The final value of all work done in accordance with the Contract:

After giving credit to the Employer for all amounts previously paid by the Employer, the balance, if any, due from the Employer to the Contractor or the Contractor to the Employer.

Final Certificate shall be issued for any sum due to the Contractor even if such is less than the sum named in the Appendix to the Form of BID.

SUBCLAUSE 60.9– CESSATION OF EMPLOYERS LIABILITY

unless the Contractor notifies the Engineer of his objection to the Final Certificate within fourteen days of delivery thereof, he shall be deemed to have agreed that he accepts the total Contract Price as set out in the Final Certificate as full settlement for all Work Done under the Contract including any variations and omissions thereof but excluding any variations and claims previously made in writing.

SUBCLAUSE 60.10 – TIME FOR PAYMENT

The amount due to the Contractor under any Interim Payment Certificate or Final Payment Certificate issued pursuant to this Clause or to any other term of the Contract, shall, subject to Clause 47, be paid by the Employer to the Contractor as follows:

- (i) In the case of Interim Payment Certificate, within the time stated in the Appendix to Form of Bid, after the Engineer has signed the Interim Payment Certificate.
- (i) In the case of the Final Payment Certificate pursuant to Sub clause 60.8, within the time stated in the Appendix to Form of Bid, after the Engineer has signed the Final Payment Certificate.
- (ii) In the event of the failure of the Employer to make payment within the times stated, the Employer shall make payment to the Contractor of simple interest at a rate equal to two percentage points above the average Base Lending Rate of three leading banks namely Kenya Commercial Bank, Standard Chartered Bank and Barclays Bank for the time being or as shall be the case from the time to time obtained from the Central Bank of Kenya. The provisions of this sub clause are without prejudice to the Contractor's entitlements under Clause 69 or otherwise.

SUBCLAUSE 60.11 - CURRENCY OF PAYMENT

The Contract Price shall be designated in Kenyan Currency.

All work performed by the Contractor under the Contract shall be valued in Kenya Shillings using the rates and prices entered in the Bills of Quantities together with such other increases to the Contract Price, except for variation of price payments in accordance with Clause 70

SUBCLAUSE 60.12 – ADVANCE PAYMENT

- (d) "At the request of the Contractor, The Employer MAY make an interest free advance payment to the contractor for the cost of mobilization in respect of the Works, in a lump sum of any amount not exceeding ten (10) percent of the Contract Price named in the Letter of Acceptance and Letter of Award. Non-Payment or delayed payment of the Advance shall not be a cause for any claim whatsoever. The Contractor is expected to have adequate financial resources to mobilise and execute the works with due diligence without the advance payment being made. Payment of such advance amount will be due under a separate certification by the Engineer after:
 - ii. Provision by the Contractor of the Performance Security in accordance with Clause 10 of the Conditions of Contract, and
 - iii. Provision by the Contractor of a Bank Guarantee which shall remain effective until the advance payment has been completely repaid by the Contractor out of current earnings under the Contract and certified accordingly by the Engineer.
- (e) A form of Bank guarantee acceptable to the Employer is included in the Tender Documents. The advance payment shall be used by the Contractor exclusively for mobilization expenditures, in connection with the works. The advance payment shall not be subject to retention money.
- (f) The advance payment shall be repaid with percentage reductions from the monthly interim payments certified by the Engineer. The reimbursement of the lump sum advance payment shall be made by deductions from the interim payments and where applicable from the balance owing to the contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original contract sum. It shall have been completed by the time 80% of the contract sum is reached.
- (g) The amount to be repaid by way of successive deductions shall be calculated by the means of the formula:

$$RI = A(x-X) / (80\%-20\%)$$

Where:

RI = the amount to be reimbursed.

A = the amount of the advance which has been granted.

x = the amount of proposed cumulative payments as a percentage of the original amount of the contract. This figure will exceed 20% but not 80%.

X = the amount of the previous cumulative payments as a percentage of the original amount of the Contract. This figure will be below 80% but not less than 20%.

(h) With each reimbursement the guarantee will be reduced accordingly.

SUBCLAUSE 60.13 MATERIALS FOR PERMANENT WORKS

With respect to materials brought by the Contractor to the site for incorporation into the permanent works, the Contractor shall,

- -Receive a credit in the month in which these materials are brought to site,
- -Be charged a debit in the month in which these materials are incorporated in the permanent works.

Both such credit and debit to be determined by the Engineer in accordance with the following provisions.

No credit shall be given unless the following conditions shall have been met to the Engineers satisfaction

The materials are in accordance with the specifications for the works;

The materials have been delivered to site and are properly stored and protected against loss, damage or deterioration;

The Contractors record of the requirements, orders receipts and use of materials are kept in a form approved by the Engineer and such records are available for inspection by the Engineer;

The Contractor has submitted a statement of his cost of acquiring and delivering the materials and plant to the Site, together with such documents as may be required for the purpose of evidencing such cost;

The materials are to be used within a reasonable time.

The amount to be credited to the Contractor shall not be more than 75% of the Contractor's reasonable cost of the materials delivered to site, as determined by the Engineer after review of the documents listed in subparagraphs (a) (iv) above;

The amount to be debited to the Contractor for any materials incorporated into the works shall be equivalent to the credit previously granted to the Contractor for such materials pursuant to Clause (b) above as determined by the Engineer.

SUBCLAUSE 63.1

Add

is unable to take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction as stipulated in subclause 8.2 of the conditions of contract.

- a) Fails to comply with Subclause 10.1 and 10.2 of the Conditions of Contract
- b) Fails to comply with Subclause 14.2 and Subclause 14.3 of the Conditions of Contract and Appendix to Form of Bid.
- c) Fails to observe the safety as stipulated in Subclause 19.1 and amendments therein.
- d) Fails to Conform to Service levels as detailed in the Appendix to Form of Bid and as required in subclause 13.1.
- e) Incurs the maximum amount of Liquidated damages as stated in the Appendix to Form of Bid or the liquidated damages amount, exceeds the performance security then the contract would be automatically Terminated.
- f) Has not completed the works despite the lapse of the Contract Period as stated in the Appendix to form of Bid

SUBCLAUSE 67.1 - ENGINEER'S DECISION

Delete the entire sub clause 67.1 and add the following;

"If a dispute of any kind whatsoever arises between the Employer and the Contractor in any connection with, or arising out of, the Contract or the execution of the works, whether during the execution of the works or after their completion and whether before or after repudiation or other termination of the Contract including any dispute as to any opinion, instruction, determination, certificate or valuation of the Engineer, the matter in dispute shall, in the first place, be referred in writing to the Engineer, with a copy to the other party. Such reference shall state it is made pursuant to this clause. No later than 28 (twenty-eight) day after the day on which he received such reference the Engineer shall give notice of his decision to the Employer and the Contractor. Such decision shall state it is made pursuant to this clause.

Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the works with all due diligence and the Contractor and the Employer shall give effect forthwith to every such decision of the Engineer unless and until the same shall be revised, as hereinafter provided, in an Amicable Settlement, Adjudicator's or Arbitrator's award.

If either the Employer or the Contractor be dissatisfied with the any decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the 28th (twenty eighth) after the day on which he received the reference, then either the Employer or the Contractor may, on or before the 28th (twenty eighth) day after the day the day on which he received notice of such decision, or on or before the 28th (twenty eighth) day after the day the day on which the said period of 28 days expired, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence Adjudication, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence Adjudication, as hereinafter provided, as to such dispute; no adjudication in respect thereof may be commenced unless such notice is given.

If the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence adjudication as to such dispute has been given by either the Employer or the Contractor on or before the twenty eighth day after the day on which the parties received notice as to such decision from the Engineer, the said decision shall become final and binding upon the Employer and the Contractor. "

SUBCLAUSE 67.2 – AMICABLE SETTLEMENT

Delete the entire sub clause 67.2 and add the following;

"Where notice to of intention to commence adjudication as to a dispute has been in accordance with sub clause 67.1, the parties shall attempt to settle such dispute in amicably before the commencement of Adjudication; provided that, unless the parties otherwise agree, Adjudication may be commenced on or after the 14th

(fourteenth) day after the day on which notice of intention to commence adjudication of such dispute was given, even if an attempt at amicable settlement thereto has been made."

SUBCLAUSE 67.3 – ADJUDICATION

Delete the entire sub clause 67.3 and add the following;

"The Adjudicator shall be appointed by the Chartered Institute of Arbitrators (Kenya) unless the appointment is agreed by the parties within 7 (seven) days of the notice to adjudication.

The adjudication process shall be conducted according to the Laws of Kenya and the Rules of the Chartered Institute of Arbitrators (Kenya)."

SUBCIAUSE 67.3 – ARBITRATION

Delete the entire sub clause 67.3 and add the following;

"Any dispute in respect of which:

The decision, if any, of the Adjudicator has not become final and binding pursuant to sub clause 67.1, and Amicable settlement has not been reached within the period stated in sub clause 67.2,

shall be finally settled, under the Laws of Kenya and the Arbitration Rules of the Chartered Institute of Arbitrators (Kenya Branch) by one or more arbitrators appointed by the Chartered Institute of Arbitrators (Kenya Branch).

Neither party shall be limited in the in the proceedings before such arbitrator/s to the evidence or arguments put before the Adjudicator for the purpose of obtaining his said decision pursuant to sub clause 67.1.

Arbitration may be commenced prior to or after completion of the works, provided that the obligations of the Employer, the Engineer and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the works.

SUBCLAUSE 68.2 – NOTICES TO EMPLOYER AND ENGINEER

Delete in Sub-Clause 68.2 the words "nominated for that purpose in Part II of these conditions".

a. The Employer's address is: The Director General,

Kenya National Highways Authority (KeNHA),

P.O. Box 49712 - 00100

NAIROBI

b. The Engineer's address is:

Director,

Road Asset and Corridor Management,

Kenya National Highways Authority (KeNHA),

P.O. Box 49712 - 00100

NAIROBI

SUBCLAUSE 68.4 – All letters and notices from the Contractor to the Employer and/Engineer must be signed by the Managing Director or the person given written power of Attorney.

In addition to the usual postal office contacts the tenderer is required to provide official email address to be used to communicate urgent letters requiring timely responses from the tenderer like tender addendum (addenda), award letter or any other deemed urgent from the Employer requiring timely preparation and reply.

The Contractors address is

Name :

P.O Box :

City/Town :

Email :

Telephone :

CLAUSE 69 - DEFAULT OF EMPLOYER

Delete Sub-Clause 69.1 (c)

In Sub-Clause 69.4 add at the end of first paragraph the following "the period of such suspension shall be as agreed upon by both parties and in any case not more than six (6) months".

In Subclause 69.4 of General Conditions of Contract Part I, insert at the end ----- "The amounts of such costs which shall be added to the Contract Price shall exclude any cost due to idle time for equipment, plant and labour."

CLAUSE 70 – CHANGES IN COST AND LEGISLATION

There shall be no claims of payments for Variation of Prices (VOP).

Delete clause 72 in its entirety and substitute the following:

The currency of BID and payment is Kenya Shillings and rates of exchange requirements are not applicable.

CLAUSE 73 – BRIBERY AND COLLUSION

Add new Clause 73.1:

"The Contractor shall not:

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

Any breach of this condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) or the commission of any offence by the Contractor or by anyone employed by him or acting on his behalf in relation to this or any other contract to which the Government of Kenya is a party shall entitle the Employer to determine the Contract (See Condition 63 hereof) and/ or to recover from the Contractor the amount or value of any such gift, consideration or commission.

Any dispute or difference of opinion arising in respect of either the interpretation, effect or application of this condition or of the amount recoverable hereunder by the Employer from the Contractor shall be decided by the Employer, whose decision shall be final and conclusive.

CLAUSE 74 - CONTRACT CONFIDENTIAL

Add new Clause 74.1:

The Contractor shall treat the details of this Contract as Private and Confidential and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere (save in so far as may be necessary for the purpose thereof) without the previous consent in writing of the Government. If any dispute arises as to the necessity of any publication or disclosures for the purposes of this Contract the same shall be referred to the decision of the Engineer mentioned in the said Conditions of Contract whose award shall be final.

SECTION XI - STANDARD CONTRACT FORMS

TABLE OF FORMS

- FORM No. 1 NOTIFICATION OF INTENTION TO AWARD
- FORM No. 2 NOTIFICATION OF AWARD LETTER OF ACCEPTANCE
- FORM No. 3 FORM OF AGREEMENT
- FORM No. 4 PERFORMANCE SECURITY [Option 1 Unconditional Demand Bank Guarantee]
- FORM No. 5 PERFORMANCE SECURITY [Option 2 Performance Bond]
- FORM No. 6 ADVANCE PAYMENT SECURITY

FORM No. 7 - FORM RB 1 APPLICATION FOR PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

FORM NO. 1: NOTIFICATION OF INTENTION TO AWARD

[This Notification of Intention to Award shall be sent to each Tenderer that submitted a Tender.] [Send this Notification to the Tenderer's Authorized Representative named in the Tender Information Form]

FORMAT

For the attention of Tenderer's Authorized Representative
Name: [insert Authorized Representative's name] Address: [insert Authorized
Representative's Address] Telephones: [insert Authorized Representative's telephone/fax numbers]
Email Address: [insert Authorized Representative's email address]
[IMPORTANT: insert the date that this Notification is transmitted to Tenderers. The Notification must be sent to all Tenderers simultaneously. This means on the same date and as close to the same time as possible.]
Date of Transmission:
This Notification is sent by: [email] on [date] (local time)
Procuring Entity: [insert the name of the Procuring entity]
Contract title: [insert the name of the contract]
Country: Kenya, County(if the Procuring Entity is from a County)
This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:
a) Request a debriefing in relation the evaluation of your Tender, and/or
b) Submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Tenderer

Contract price: [insert contract price of the successful Tender]

Name: [insert name of successful Tenderer] Address: [insert address of the successful Tenderer]

2. Other Tenderers: insert names of all Tenderers that submitted a Tender. If the Tender's price was evaluated include the evaluated price as well as the Tender price as read out.]

	Name of Tenderer	Tender price	Evaluated Tender price	Comments (if any)
1				
2				
3				
4				
5				
6				
7				
Etc.				

1. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).

You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award. Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:

Attention: [insert full name of person, if applicable] **Title/position**: [insert title/position] **Procuring**

Entity: [insert name of Procuring Entity] **Email address**: [insert email address]

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end. The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

2. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [insert date] (local time).

Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement- related Complaint as follows:

Attention: [insert full name of person, if applicable]

Title/position: [insert title/position]

Procuring Entity: [insert name of Procuring Entity]

Email address: [insert email address]

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

In summary, there are four essential requirements:

- a) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.
- b) The complaint can only challenge the decision to award the contract.
- c) You must submit the complaint within the period stated above.
- d) You must include, in your complaint, all of the information necessary to support your case.
- e) The application must be accompanied by the fees set out in the Procurement Regulations, which shall not be refundable (information available from the Public Procurement Authority at www.ppoa.go.ke.

3. Standstill Period

- a) **DEADLINE:** The Standstill Period is due to end at midnight on [insert date] (local time).
 - i) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.
 - ii) The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us. On behalf of the

Procuring Entity:	
Name	
Title and Position	
Signature	
Date	

FORM NO. 2: LETTER OF NOTIFICATION OF AWARD

Letter of Acceptance

[letter head paper of the Procuring Entity]

[date]

FORMAT

To: [name and address of the Contractor]

This is to notify you that your Tender dated [date] for execution of the [name of the Contract and identification number, as given in the SCC] for the Accepted Contract Amount [amount in numbers and words] [name of currency], as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 30 days in accordance with the Conditions of Contract, using, for that purpose, one of the Performance Security Forms included in Section X, Contract Forms, of the tender document.

We attach a copy of the Contact for your

Authorized Signature:

Name and Title of

Signatory: Name of

Agency:

Attachment: Contract Agreement

FORM NO. 3: FORM OF AGREEMENT

FORM OF AGREEMENT

THI	S AGREEMENT made the	day of	, between
Con	euring Entity"), of the one part, and tractor"), of the other part:		(herein after "the
be e	nese Works and the remedying of a	accepted a Tender by the Contract	should for for the execution and completion g Entity and the Contractor agree as
1.	In this Agreement words and exp them in the Contract documents		nings as are respectively assigned to
2.	The following documents shall be This Agreement shall prevail over		construed as part of this Agreement.
	a) The Letter of Acceptance		
	b) The Letter of Tender		
	c) The addenda Nos	(if any)	
	d) The Particular Conditions		
	e) The General Conditions;		
	f) The Specification		
	g) The Drawings; and		
	h) The completed Schedules a	nd any other documents forming J	part of the contract.
3.	this Agreement, the Contractor h	•	ity to the Contractor as specified in ng Entity to execute the Works and ovisions of the Contract.
4.	completion of the Works and the	e remedying of defects therein, the provisions of the Contract at the	consideration of the execution and the Contract Price or such other sum times and in the manner prescribed
	VITNESS whereof the parties here of Kenya on the day, month and y		be executed in accordance with the
Sign	ed by		
		(for the Pro	ocuring Entity)
Sign	ed by		
		(for the	Contractor)

FORM NO. 4 - PERFORMANCE SECURITY

- (Unconditional Demand Bank Guarantee)

[Gu	arantor letterhead or SWIFT identifier code]
Ben	eficiary:[insert name and Address of Procuring
Enti	ty] Date:[Insert date of issue]
PEF	RFORMANCE GUARANTEE No.:
Gua	arantor: [Insert name and address of place of issue, unless indicated in the letterhead]
1.	We have been informed that (herein after called "the Applicant") has entered into Contract No dated with the Beneficiary, for the execution of (herein after called "the Contract").
2.	Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
3.	At the request of the Applicant, we as Guarantor, here by irrevocably undertake to pay the Beneficiary
	any sum or sums not exceeding in total an amount of (), such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.
4.	This guarantee shall expire, no later than the
5.	The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."
 [Nai	me of Authorized Official, signature(s) and seals/stamps]
	e: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from final product.
1 The	e Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount cified in the Letter of Acceptance, less provisional sums, if

any, and denominated either in the currency(cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

² Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Procuring Entity might consider adding the following text to the form, at the end of the

pen ultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

FORM No. 5 - PERFORMANCE SECURITY OPTION 2– (Performance Bond)

[Note: Procuring Entities are advised to use Performance Security—Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bond holder to action]

[Guarantor letterhead or SWIFT identifier code]			
Bene	eficiary:[insert name and Address of Procuring Entity]		
Date	:[Insert date of issue]		
PER	FORMANCE BOND No.:		
Gua	rantor: [Insert name and address of place of issue, unless indicated in the letter head]		
1	By this Bond as Principal (hereinafter called "the Contractor") and as Surety (hereinafter called "the Surety"), are held and firmly bound unto as Obligee (hereinafter called "the Procuring Entity") in the amount of for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.		
2.	WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the day of, 20, for in accordance with the documents, plans, specifications, and amendments thereto, which to the extent here in provided for, are by reference made part hereof and are herein after referred to as the Contract.		
3.	NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations there under, the Surety may promptly remedy the default, or shall promptly:		
	1) Complete the Contract in accordance with its terms and conditions; or		
	2) Obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder,		

3) Pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions upto a total not exceeding the amount of this Bond.

the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the

4. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Contract, less the amount properly paid by Procuring Entity to Contractor; or

5. Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named here in or the heirs, executors,

•	sealed with his corporate seal duly attested by the signature of his legal of 20
SIGNED ON	on behalf of
By	in the capacity of
In the presence of	
SIGNED ON	on behalf of
By	in the capacity of
In the presence of	

administrators, successors, and assigns of the Procuring Entity.

PERFORMANCE BASED CONTRACT FOR MAINTENANCE OF STREET LIGHTING ON ATHI RIVER – BISIL (A2) ROAD

FORM NO. 6 - ADVANCE PAYMENT SECURITY [Demand Bank Guarantee] [Guarantor letterhead or SWIFT identifier code] [Guarantor letterhead or SWIFT identifier code] Beneficiary: [Insert name and Address of Procuring Entity] Date:___[Insert date of issue] **ADVANCE PAYMENT GUARANTEE No.:** [Insert guarantee reference number] **Guarantor:** [Insert name and address of place of issue, unless indicated in the letterhead] We have been informed that _____ (herein after called "the Applicant") has entered into Contract No. _____ dated with the Beneficiary, for the execution of (herein after called" the Contract"). Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum_____() is to be made against an advance payment guarantee. At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of () upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant: a) Has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number_at___ The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the_day of_____ whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for

[Name of Authorized Official, signature(s) and seals/stamps]

guarantee.

Note: All italicized text (including footnotes) is for use in preparing this form and shall

such extension, such request to be presented to the Guarantor before the expiry of the

PERFORMANCE BASED CONTRACT FOR MAINTENANCE OF STREET LIGHTING ON ATHI RIVER – BISIL (A2) ROAD

be deleted from the final product.

The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Procuring Entity.

Insert the expected expiration date of the Time for Completion. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Procuring Entity might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

PERFORMANCE BASED CONTRACT FOR MAINTENANCE OF STREET LIGHTING ON ATHI RIVER – BISIL (A2) ROAD

FORM NO. 7: FORM RB 1 APPLICATION FOR PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD FOURTEENTH SCHEDULE (r.203(1))

FORM FOR REVIEW PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO OF20
BETWEEN
AND
RESPONDENT (Procuring Entity)
Request for review of the decision of the (Name of the Procuring Entity of
dated theday of20in the matter of Tender No
20 for(Tender description). REQUEST FOR REVIEW
I/We, the above-named Applicant(s), of address: Physical
address
request the Public Procurement Administrative Review Board to review the whole/part of the
above-mentioned decision on the following grounds, namely: 1. 2. By this memorandum,
the Applicant requests the Board for an order/orders that: 1. 2. SIGNED
(Applicant) Dated on day of/20
FOR OFFICIAL USE ONLY
Lodged with the Secretary Public Procurement Administrative Review Board onday of

Board Secretary