

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF BUSIA DEPARTMENT OF INFRASTRUCTURE AND ENERGY

PROPOSED 2NO. 30M HIGH MAST COMMUNITY LIGHTNING ARRESTER UNITS IN
BUSIA COUNTY TESO NORTH SUB COUNTY AT KAKAPEL IN ANGURAI SOUTH
WARD AND AT KORISAI IN MALABA NORTH WARD

FOR THE DEPARTMENT OF GOVERNORSHIP.

BILL OF QUANTITIES

TENDER NUMBER:-BSA/CG/OOG/03/2020/2021

NEGOTIATION NO.824858

PREPARED BY

COUNTY ELECTRICAL ENGINEER
DIRECTORATE OF PUBLIC WORKS
P.O BOX 470-50400
BUSIA (K)

ISSUED BY:

DIRECTOR PUBLIC WORKS
DIRECTORATE OF PUBLIC WORKS
P.O BOX 470-50400
BUSIA (K)

SEPTEMBER-2020

REPUBLIC OF KENYA



STANDARD TENDER DOCUMENT FOR PROCUREMENT OF WORKS (BUILDING AND ASSOCIATED CIVIL ENGINEERING WORKS)

(REVISED OCTOBER 2007)

REPUBLIC OF KENYA



COUNTY GOVERNMENT OF BUSIA

DEPARTMENT OF INFRASTRUCTURE & ENERGY

Supplied as part of the contract for ***proposed 30M high mast community lightning arrester to Busia County***

.....

Issued by:-

Electrical Engineering Section,

Department of Infrastructure & Energy P.O. BOX PRIVATE BAG-50400, BUSIA. The contract for the above mentioned works was entered into the.....day of.....2020 by the undersigned refers to these Bills of Quantities and the Department of Infrastructure and General Specifications dated March,1976 (together with any amendments issued there to) shall be read and construed as part of the said contract.

.....
CONTRACTOR

Date.....

.....
CHIEF OFFICER DEPARTMENT OF GOVERNORSHIP

Date.....

SPECIAL NOTES

The Contractor is required to check the numbers of the pages of these Bills of Quantities and should he find any missing or figures indistinct he must inform the County Electrical Engineer Department of Public Works, Busia at once and have the same rectified.

Should the contractor be in doubt of the precise meaning of any item or figure for any reason whatsoever, he must inform the County Electrical Engineer, Ministry of Infrastructure, Busia in order that the correct meaning may be decided before the date for submission of tenders.

No liability will be admitted nor claim allowed in respect of errors in the contractor's tender due to mistakes in the specifications which should have been rectified in the manner described above.

SIGNATURE PAGE AND NOTES

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INTRODUCTION

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

SECTION I

INVITATION FOR TENDERS

Tender reference No. BSA/CG/OOG/03/2020/2021

Tender Name: Supply and Installation of Lightening Arrestors at Kakapel Market and Korisai Primary School

Tender documents containing detailed information on the tenders can be freely downloaded from the **IFMIS Supplier portal** (<https://supplier.treasury.go.ke>, <https://tenders.go.ke>).

Complete tender documents must be submitted through the *IFMIS* supplier portal: ***supplier.treasury.go.ke*** so as to be received on or before **Monday, 26th October 2020** at **9.00 a.m.** All tenders **MUST** be submitted through the IFMIS platform **SUPPLY CHAIN MANAGEMENT SERVICES**

NOTE: Bidders who may experience challenges in accessing and uploading their tenders in the ifmis tender portal should contact the IFMIS Helpdesk (email [http: ifmis.go.ke](mailto:ifmis.go.ke). Tel 0800721477/0204801801) at the treasury or contact our Supply Chain Function office located at the County Headquarters first floor, room 47.

THE ACCOUNTING OFFICER

COUNTY GOVERNMENT OF BUSIA

SECTION II
INSTRUCTIONS TO TENDERERS

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INSTRUCTIONS TO TENDERERS:

1. General/Eligibility/Qualifications/Joint venture/Cost of tendering

- 1.1 The Employer as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The successful tenderer will be expected to complete the Works by the Intended Completion Date specified in the tender documents.
- 1.2 All tenderers shall provide the Qualification Information, a statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or has not been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the Works, and any of its affiliates, shall not be eligible to tender.
- 1.3 All tenderers shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 1.4 In the event that pre-qualification of potential tenderers has been undertaken, only tenders from pre-qualified tenderers will be considered for award of Contract. These qualified tenderers should submit with their tenders any information updating their original pre-qualification applications or, alternatively, confirm in their tenders that the originally submitted pre-qualification information remains essentially correct as of the date of tender submission.
- 1.5 Where no pre-qualification of potential tenderers has been done, all tenderers shall include the following information and documents with their tenders, unless otherwise stated:
 - (a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the tender to commit the tenderer.
 - (b) Total monetary value of construction work performed for each of the last five years:
 - (c) Experience in works of a similar nature and size for each of the last five years, and details of work under way or contractually committed; and names and addresses of clients who may be contacted for further information on these contracts;
 - (d) Major items of construction equipment proposed to carry out the Contract and an undertaking that they will be available for the Contract.
 - (e) Qualifications and experience of key site management and technical personnel proposed for the Contract and an undertaking that they shall be available for the Contract.
 - (f) Reports on the financial standing of the tenderer, such as profit and loss statements and auditor's reports for the past five years;
 - (g) Evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);

- (h) Authority to seek references from the tenderer's bankers;
 - (i) Information regarding any litigation, current or during the last five years, in which the tenderer is involved, the parties concerned and disputed amount; and
 - (j) Proposals for subcontracting components of the Works amounting to more than 10 percent of the Contract Price.
- 1.6 Tenders submitted by a joint venture of two or more firms as partners shall comply with the following requirements, unless otherwise stated:
- (a) The tender shall include all the information listed in clause 1.5 above for each joint venture partner;
 - (b) The tender shall be signed so as to be legally binding on all partners;
 - (c) All partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
 - (d) One of the partners will be nominated as being in charge, authorized to incur liabilities, and receive instructions for and on behalf of all partners of the joint venture; and
 - (e) The execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.
- 1.7 To qualify for award of the Contract, tenderers shall meet the following minimum qualifying criteria;
- (a) annual volume of construction work of at least 2.5 times the estimated annual cash flow for the Contract;
- Experience as main contractor in the construction of at least;
- (b) two works of a nature and complexity equivalent to the Works over the last 10 years (to comply with this requirement, works cited should be at least 70 percent complete);
 - (c) proposals for the timely acquisition (own, lease, hire, etc.) of the essential equipment listed as required for the Works;
 - (d) a Contract manager with at least five years' experience in works of an equivalent nature and volume, including no less than three years as Manager; and
 - (e) liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of no less than 4 months of the estimated payment flow under this Contract.
- 1.8 The figures for each of the partners of a joint venture shall be added together to determine the tenderer's compliance with the minimum qualifying criteria of clause 1.7 (a) and (e); however, for a joint venture to qualify, each of its partners must meet at least 25 percent of minimum criteria 1.7 (a), (b) and (e) for an individual tenderer, and the partner in charge at least 40 percent of those minimum criteria. Failure to comply with this requirement will result in rejection of the joint venture's tender. Subcontractors' experience and resources will not be taken into account in determining the tenderer's compliance with the qualifying criteria, unless otherwise stated.
- 1.9 Each tenderer shall submit only one tender, either individually or as a partner in a joint venture. A tenderer who submits or participates in more than one tender (other than as

a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the tenderer's participation to be disqualified.

- 1.10 The tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible or liable for those costs.
- 1.11 The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the tenderer's own expense.
- 1.12 The procuring entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- 1.13 The price to be charged for the tender document shall not exceed Kshs1,000/=
- 1.14 The procuring entity shall allow the tenderer to review the tender document free of charge before purchase.

2. Tender Documents

- 2.1 The complete set of tender documents comprises the documents listed below and any addenda issued in accordance with Clause 2.4.
 - (a) These Instructions to Tenderers
 - (b) Form of Tender and Qualification Information
 - (c) Conditions of Contract
 - (d) Appendix to Conditions of Contract
 - (e) Specifications
 - (f) Drawings
 - (g) Bills of Quantities
 - (h) Forms of Securities
- 2.2 The tenderer shall examine all Instructions, Forms to be filled and Specifications in the tender documents. Failure to furnish all information required by the tender documents, or submission of a tender not substantially responsive to the tendering documents in every respect will be at the tenderer's risk and may result in rejection of his tender.
- 2.3 A prospective tenderer making an inquiry relating to the tender documents may notify the Employer in writing or by cable, telex or facsimile at the address indicated in the letter of invitation to tender. The Employer will only respond to requests for clarification received earlier than seven days prior to the deadline for submission of tenders. Copies of the Employer's response will be forwarded to all persons issued with tendering documents, including a description of the inquiry, but without identifying its source.
- 2.4 Before the deadline for submission of tenders, the Employer may modify the tendering documents by issuing addenda. Any addendum thus issued shall be part of the tendering documents and shall be communicated in writing or by cable, telex or facsimile to all tenderers. Prospective tenderers shall acknowledge receipt of each addendum in writing to the Employer.
- 2.5 To give prospective tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend, as necessary, the deadline for submission of tenders, in accordance with Clause 4.2 here below.

3. Preparation of Tenders

- 3.1 All documents relating to the tender and any correspondence shall be in English language.
- 3.2 The tender submitted by the tenderer shall comprise the following:
- (a) These Instructions to Tenderers, Form of Tender, Conditions of Contract, Appendix to Conditions of Contract and Specifications;
 - (b) Tender Security;
 - (c) Priced Bill of Quantities;
 - (d) Qualification Information Form and Documents;
 - (e) Alternative offers where invited; and
 - (f) Any other materials required to be completed and submitted by the tenderers.
- 3.3 The tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items for which no rate or price is entered by the tenderer will not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause relevant to the Contract, as of 30 days prior to the deadline for submission of tenders, shall be included in the tender price submitted by the tenderer.
- 3.4 The rates and prices quoted by the tenderer shall only be subject to adjustment during the performance of the Contract if provided for in the Appendix to Conditions of Contract and provisions made in the Conditions of Contract.
- 3.5 The unit rates and prices shall be in Kenya Shillings.
- 3.6 Tenders shall remain valid for a period of sixty (60) days from the date of submission. However, in exceptional circumstances, the Employer may request that the tenderers extend the period of validity for a specified additional period. The request and the tenderers' responses shall be made in writing. A tenderer may refuse the request without forfeiting the Tender Security. A tenderer agreeing to the request will not be required or permitted to otherwise modify the tender, but will be required to extend the validity of Tender Security for the period of the extension, and in compliance with Clause 3.7 - 3.11 in all respects.
- 3.7 The tenderer shall furnish, as part of the tender, a Tender Security in the amount and form specified in the appendix to invitation to tenderers. This shall be in the amount not exceeding 2 percent of the tender price
- 3.8 The format of the Tender Security should be in accordance with the form of Tender Security included in Section G - Standard forms or any other form acceptable to the Employer. Tender Security shall be valid for 30 days beyond the validity of the tender.
- 3.9 Any tender not accompanied by an acceptable Tender Security shall be rejected. The Tender Security of a joint venture must define as "Tenderer" all joint venture partners and list them in the following manner: a joint venture consisting of"", "", and ".....".
- 3.10 The Tender Securities of unsuccessful tenderers will be returned within 28 days of the end of the tender validity period specified in Clause 3.6.
- 3.11 The Tender Security of the successful tenderer will be discharged when the tenderer has signed the Contract Agreement and furnished the required Performance Security.
- 3.12 The Tender Security may be forfeited

- (a) if the tenderer withdraws the tender after tender opening during the period of tender validity;
 - (b) if the tenderer does not accept the correction of the tender price, pursuant to Clause 5.7;
 - (c) in the case of a successful tenderer, if the tenderer fails within the specified time limit to
 - (i) Sign the Agreement, or
 - (ii) Furnish the required Performance Security.
- 3.13 Tenderers shall submit offers that comply with the requirements of the tendering documents, including the basic technical design as indicated in the Drawings and Specifications. Alternatives will not be considered, unless specifically allowed in the invitation to tender. If so allowed, tenderers wishing to offer technical alternatives to the requirements of the tendering documents must also submit a tender that complies with the requirements of the tendering documents, including the basic technical design as indicated in the Drawings and Specifications. In addition to submitting the basic tender, the tenderer shall provide all information necessary for a complete evaluation of the alternative, including design calculations, technical specifications, breakdown of prices, proposed construction methods and other relevant details. Only the technical alternatives, if any, of the lowest evaluated tender conforming to the basic technical requirements shall be considered.
- 3.14 The tenderer shall prepare one original of the documents comprising the tender documents as described in Clause 3.2 of these Instructions to Tenderers, bound with the volume containing the Form of Tender, and clearly marked "ORIGINAL". In addition, the tenderer shall submit copies of the tender, in the number specified in the invitation to tender, and clearly marked as "COPIES". In the event of discrepancy between them, the original shall prevail.
- 3.15 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the tenderer, pursuant to Clause 1.5 (a) or 1.6 (b), as the case may be. All pages of the tender where alterations or additions have been made shall be initiated by the person or persons signing the tender.
- 3.16 Clarification of tenders shall be requested by the tenderer to be received by the procuring entity not later than 7 days prior to the deadline for submission of tenders.
- 3.17 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.
- 3.18 The tender security shall be in the amount of 0.5 – 2 per cent of the tender price.

4. Submission of Tenders

- 4.1 The tenderer shall seal the original and all copies of the tender in two inner envelopes and one outer envelope, duly marking the inner envelopes as "**ORIGINAL**" and "**COPIES**" as appropriate. The inner and outer envelopes shall:
 - (a) be addressed to the Employer at the address provided in the invitation to tender;

- (b) bear the name and identification number of the Contract as defined in the invitation to tender; and
 - (c) provide a warning not to open before the specified time and date for tender opening.
- 4.2 Tenders shall be delivered to the Employer at the address specified above not later than the time and date specified in the invitation to tender. However, the Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with Sub-Clause 2.5 in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline will then be subject to the new deadline.
- 4.3 Any tender received after the deadline prescribed in clause 4.2 will be returned to the tenderer un-opened.
- 4.4 Tenderers may modify or withdraw their tenders by giving notice in writing before the deadline prescribed in clause 4.2. Each tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with clause 3.13 and 4.1, with the outer and inner envelopes additionally marked "**MODIFICATION**" and "**WITHDRAWAL**", as appropriate. No tender may be modified after the deadline for submission of tenders.
- 4.5 Withdrawal of a tender between the deadline for submission of tenders and the expiration of the period of tender validity specified in the invitation to tender or as extended pursuant to Clause 3.6 may result in the forfeiture of the Tender Security pursuant to Clause 3.11.
- 4.6 Tenderers may only offer discounts to, or otherwise modify the prices of their tenders by submitting tender modifications in accordance with Clause 4.4 or be included in the original tender submission.

5. Tender Opening and Evaluation

- 5.1 The tenders will be opened by the Employer, including modifications made pursuant to Clause 4.4, in the presence of the tenderers' representatives who choose to attend at the time and in the place specified in the invitation to tender. Envelopes marked "**WITHDRAWAL**" shall be opened and read out first. Tenderers' and Employer's representatives who are present during the opening shall sign a register evidencing their attendance.
- 5.2 The tenderers' names, the tender prices, the total amount of each tender and of any alternative tender (if alternatives have been requested or permitted), any discounts, tender modifications and withdrawals, the presence or absence of Tender Security, and such other details as may be considered appropriate, will be announced by the Employer at the opening. Minutes of the tender opening, including the information disclosed to those present will be prepared by the Employer.
- 5.3 Information relating to the examination, clarification, evaluation, and comparison of tenders and recommendations for the award of Contract shall not be disclosed to tenderers or any other persons not officially concerned with such process until the award to the successful tenderer has been announced. Any effort by a tenderer to influence the Employer's officials, processing of tenders or award decisions may result in the rejection of his tender.

- 5.4 To assist in the examination, evaluation, and comparison of tenders, the Employer at his discretion, may ask any tenderer for clarification of the tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, telex or facsimile but no change in the price or substance of the tender shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered in the evaluation of the tenders in accordance with Clause 5.7.
- 5.5 Prior to the detailed evaluation of tenders, the Employer will determine whether each tender
- (a) Meets the eligibility criteria defined in Clause 1.7;
 - (b) Has been properly signed;
 - (c) Is accompanied by the required securities; and
 - (d) Is substantially responsive to the requirements of the tendering documents.
- A substantially responsive tender is one which conforms to all the terms, conditions and specifications of the tendering documents, without material deviation or reservation. A material deviation or reservation is one
- (a) Which affects in any substantial way the scope, quality, or performance of the works;
 - (b) Which limits in any substantial way, inconsistent with the tendering documents, the Employer's rights or the tenderer's obligations under the Contract; or
 - (c) Whose rectification would affect unfairly the competitive position of other tenderers presenting substantially responsive tenders.
- 5.6 If a tender is not substantially responsive, it will be rejected, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.
- 5.7 Tenders determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows:
- (a) Where there is a discrepancy between the amount in figures and the amount in words, the amount in words will prevail; and
 - (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will prevail, unless in the opinion of the Employer, there is an obvious typographical error, in which case the adjustment will be made to the entry containing that error.
 - (c) In the event of a discrepancy between the tender amount as stated in the Form of Tender and the corrected tender figure in the main summary of the Bill of Quantities, the amount as stated in the Form of Tender shall prevail.
 - (d) The Error Correction Factor shall be computed by expressing the difference between the tender amount and the corrected tender sum as a percentage of the corrected Builder's Work (i.e. Corrected tender sum less P.C. and Provisional Sums)
 - (e) The Error Correction Factor shall be applied to all Builder's Work (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuation of variations.
 - (f) The amount stated in the tender will be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the tenderer, shall be considered as binding upon the tenderer. If the tenderer does not accept the corrected amount, the tender may be

rejected and the Tender Security may be forfeited in accordance with clause 3.11.

- 5.8 The Employer will evaluate and compare only the tenders determined to be substantially responsive in accordance with Clause 5.5.
- 5.9 In evaluating the tenders, the Employer will determine for each tender the evaluated tender price by adjusting the tender price as follows:
- (a) Making any correction for errors pursuant to clause 5.7;
 - (b) Excluding provisional sums and the provision, if any, for contingencies in the Bill of Quantities, but including Day works where priced competitively.
 - (c) Making an appropriate adjustment for any other acceptable variations, deviations, or alternative offers submitted in accordance with clause 3.12; and
 - (d) Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with clause 4.6
- 5.10 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the tender documents or otherwise result in unsolicited benefits for the Employer will not be taken into account in tender evaluation.
- 5.11 The tenderer shall not influence the Employer on any matter relating to his tender from the time of the tender opening to the time the Contract is awarded. Any effort by the Tenderer to influence the Employer or his employees in his decision on tender evaluation, tender comparison or Contract award may result in the rejection of the tender.
- 5.12 Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not sub-contract work valued at more than 50% of the Contract Price excluding Provisional Sums to a non-indigenous sub-contractor.

6. Award of Contract

- 6.1 Subject to Clause 6.2, the award of the Contract will be made to the tenderer whose tender has been determined to be substantially responsive to the tendering documents and who has offered the lowest evaluated tender price, provided that such tenderer has been determined to be
- (a) Eligible in accordance with the provision of Clauses 1.2, and
 - (b) Qualified in accordance with the provisions of clause 1.7 and 1.8.
- Notwithstanding clause 6.1 above, the Employer reserves the right to accept or reject any tender, and to cancel the tendering process and reject all tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the action.
- 6.2 The tenderer whose tender has been accepted will be notified of the award prior to expiration of the tender validity period in writing or by cable, telex or facsimile. This notification (hereinafter and in all Contract documents called the "Letter of Acceptance") will state the sum (hereinafter and in all Contract documents called the

“Contract Price”) that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract. At the same time the other tenderers shall be informed that their tenders have not been successful.

The contract shall be formed on the parties signing the contract.

- 6.3 The Agreement will incorporate all agreements between the Employer and the successful tenderer. Within 14 days of receipt the successful tenderer will sign the Agreement and return it to the Employer.
- 6.4 Within 21 days after receipt of the Letter of Acceptance, the successful tenderer shall deliver to the Employer a Performance Security in the amount stipulated in the Appendix to Conditions of Contract and in the form stipulated in the Tender documents. The Performance Security shall be in the amount and specified form
- 6.5 Failure of the successful tenderer to comply with the requirements of clause 6.5 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Tender Security.
- 6.6 Upon the furnishing by the successful tenderer of the Performance Security, the Employer will promptly notify the other tenderers that their tenders have been unsuccessful.
- 6.7 Preference where allowed in the evaluation of tenders shall not be allowed for contracts not exceeding one year (12 months)
- 6.8 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.
- 6.9 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.
- 6.10 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)
- 6.11 Where contract price variation is allowed, the valuation shall not exceed 15% of the original contract price.
- 6.12 Price variation request shall be processed by the procuring entity within 30 days of receiving the request.
- 6.13 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.
- 6.14 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.
- 6.15 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.

7. Corrupt and Fraudulent practices

7.1 The procuring entity requires that tenderers observe the highest standards of ethics during procurement process and execution of contracts. A tenderer shall sign a declaration that he has not and will not be involved in corrupt and fraudulent practices.

SECTION III: CONDITIONS OF CONTRACT

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CONDITIONS OF CONTRACT

1. Definitions

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

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

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

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

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

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

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

“The Contract Price” is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

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

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

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

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

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

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

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

Institutions and Corporations, etc.) is the party who employs the Contractor to carry out the Works.

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

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

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

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

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

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

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

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

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

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

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

“A Variation” is an instruction given by the Project Manager which varies the Works.

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

Interpretation

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

- 1.2 If sectional completion is specified in the Appendix to Conditions of Contract, reference in the Conditions of Contract to the Works, the Completion Date and the Intended Completion Date apply to any section of the Works (other than references to the Intended Completion Date for the whole of the Works).
- 1.3 The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;
 - (1) Agreement,
 - (2) Letter of Acceptance,
 - (3) Contractor's Tender,
 - (4) Appendix to Conditions of Contract,
 - (5) Conditions of Contract,
 - (6) Specifications,
 - (7) Drawings,
 - (8) Bill of Quantities,
 - (9) Any other documents listed in the Appendix to Conditions of Contract as forming part of the Contract.

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

3. Language and Law

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

4 Project Manager's Decisions

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

5 Delegation

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

6 Communications

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

7 Subcontracting

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

8 Other Contractors

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

9 Personnel

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

10 Works

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

11 Safety and Temporary Works

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

12. Discoveries

- 12.1 Anything of historical or other interest or of significant value unexpectedly discovered on Site shall be the property of the Employer. The Contractor shall

notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

13. Work Program

- 13.1 Within the time stated in the Appendix to Conditions of Contract, the Contractor shall submit to the Project Manager for approval a program showing the general methods, arrangements, order, and timing for all the activities in the Works. An update of the program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Work, including any changes to the sequence of the activities.

The Contractor shall submit to the Project Manager for approval an updated program at intervals no longer than the period stated in the Appendix to Conditions of Contract. If the Contractor does not submit an updated program within this period, the Project Manager may withhold the amount stated in the said Appendix from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted. The Project Manager's approval of the program shall not alter the Contractor's obligations. The Contractor may revise the program and submit it to the Project Manager again at any time. A revised program shall show the effect of Variations and Compensation Events.

14. Possession of Site

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

15. Access to Site

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

16. Instructions

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

17. Extension or Acceleration of Completion Date

- 17.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a variation is issued which makes it impossible for completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining Work, which would cause the Contractor to incur additional cost. The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager in writing for a decision upon the effect of a Compensation Event or variation and submitting full supporting

information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay caused by such failure shall not be considered in assessing the new (extended) Completion Date.

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

18. Management Meetings

- 18.1** A Contract management meeting shall be held monthly and attended by the Project Manager and the Contractor. Its business shall be to review the plans for the remaining Work and to deal with matters raised in accordance with the early warning procedure. The Project Manager shall record the minutes of management meetings and provide copies of the same to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

19. Early Warning

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

20. Defects

- 20.1** The Project Manager shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a defect and to uncover and test any Work that the Project Manager considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor, However, if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.
- 20.2** The Project Manager shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract. The Defects Liability Period shall be extended for as long as defects remain to be corrected.
- 20.3** Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Project Manager's notice. If the

Contractor has not corrected a defect within the time specified in the Project Manager's notice, the Project Manager will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

21. Bills of Quantities

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

22. Variations

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

23. Payment Certificates, Currency of Payments and Advance Payments

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

10% (ten percent) of the original amount of the Contract. The advance shall not be subject to retention money.

- b) No advance payment may be made before the Contractor has submitted proof of the establishment of deposit or a directly liable guarantee satisfactory to the Employer in the amount of the advance payment. The guarantee shall be in the same currency as the advance.
- c) Reimbursement of the lump sum advance shall be made by deductions from the Interim payments and where applicable from the balance owing to the Contractor. Reimbursement shall begin when the amount of the sums due under the Contract reaches 20% of the original amount of the Contract. It shall have been completed by the time 80% of this amount is reached.

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

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

Where:

R = the amount to be reimbursed

A = the amount of the advance which has been granted

x^1 = the amount of proposed cumulative payments as a percentage of the original amount of the Contract. This figure will exceed 20% but not exceed 80%.

x^{11} = the amount of the previous cumulative payments as a percentage of the original amount of the Contract. This figure will be below 80% but not less than 20%.

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

24. Compensation Events

24.1 The following issues shall constitute Compensation Events:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Appendix to Conditions of Contract.
- (b) The Employer modifies the List of Other Contractors, etc., in a way that affects the Work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue drawings, specifications or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon the Work, which is then found to have no defects.

- (e) The Project Manager unreasonably does not approve a subcontract to be let.
 - (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to tenderers (including the Site investigation reports), from information available publicly and from a visual inspection of the Site.
 - (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer or additional work required for safety or other reasons.
 - (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
 - (i) The effects on the Contractor of any of the Employer's risks.
 - (j) The Project Manager unreasonably delays issuing a Certificate of Completion.
 - (k) Other compensation events described in the Contract or determined by the Project Manager shall apply.
- 24.2 If a compensation event would cause additional cost or would prevent the Work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 24.3 As soon as information demonstrating the effect of each compensation event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager will assume that the Contractor will react competently and promptly to the event.
- 24.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having co-operated with the Project Manager.
- 24.5 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the Appendix to Conditions of Contract.
- 24.6 The Contractor shall give written notice to the Project Manager of his intention to make a claim within thirty days after the event giving rise to the claim has first arisen. The claim shall be submitted within thirty days thereafter. Provided always that should the event giving rise to the claim of continuing effect, the Contractor shall submit an interim claim within the said thirty days and a final claim within thirty days of the end of the event giving rise to the claim.

25. Price Adjustment

- 25.1 The Project Manager shall adjust the Contract Price if taxes, duties and other levies are changed between the date 30 days before the submission of tenders for the Contract and the date of Completion. The adjustment shall be the change in the amount of tax payable by the Contractor.
- 25.2 The Contract Price shall be deemed to be based on exchange rates current at the date of tender submission in calculating the cost to the Contractor of materials to be specifically imported (by express provisions in the Contract Bills of Quantities or Specifications) for permanent incorporation in the Works. Unless otherwise stated in the Contract, if at any time during the period of the Contract exchange rates shall be varied and this shall affect the cost to the Contractor of such materials, then the Project Manager shall assess the net difference in the cost of such materials. Any amount from time to time so assessed shall be added to or deducted from the Contract Price, as the case may be.
- 25.3 Unless otherwise stated in the Contract, the Contract Price shall be deemed to have been calculated in the manner set out below and in sub-clauses 25.4 and 25.5 and shall be subject to adjustment in the events specified there under;
- (i) The prices contained in the Contract Bills of Quantities shall be deemed to be based upon the rates of wages and other emoluments and expenses as determined by the Joint Building Council of Kenya (J.B.C.) and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.
 - (ii) Upon J.B.C. determining that any of the said rates of wages or other emoluments and expenses are increased or decreased, then the Contract Price shall be increased or decreased by the amount assessed by the Project Manager based upon the difference, expressed as a percentage, between the rate set out in the schedule of basic rates issued 30 days before the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of labour incorporated within the amount of Work remaining to be executed at the date of publication of such increase or decrease.
 - (iii) No adjustment shall be made in respect of changes in the rates of wages and other emoluments and expenses which occur after the date of Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.
- 25.4 The prices contained in the Contract Bills of Quantities shall be deemed to be based upon the basic prices of materials to be permanently incorporated in the Works as determined by the J.B.C. and set out in the schedule of basic rates issued 30 days before the date for submission of tenders. A copy of the schedule used by the Contractor in his pricing shall be attached in the Appendix to Conditions of Contract.
- 25.5 Upon the J.B.C. determining that any of the said basic prices are increased or decreased then the Contract Price shall be increased or decreased by the amount to be assessed by the Project Manager based upon the difference between the price set out in the schedule of basic rates issued 30 days before

the date for submission of tenders and the rate published by the J.B.C. and applied to the quantum of the relevant materials which have not been taken into account in arriving at the amount of any interim certificate under clause 23 of these Conditions issued before the date of publication of such increase or decrease.

25.6 No adjustment shall be made in respect of changes in basic prices of materials which occur after the date for Completion except during such other period as may be granted as an extension of time under clause 17.0 of these Conditions.

25.7 The provisions of sub-clause 25.1 to 25.2 herein shall not apply in respect of any materials included in the schedule of basic rates.

26. Retention

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

27. Liquidated Damages

27.1 The Contractor shall pay liquidated damages to the Employer at the rate stated in the Appendix to Conditions of Contract for each day that the actual Completion Date is later than the Intended Completion Date. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not alter the Contractor's liabilities.

27.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rate specified in Clause 23.30.

28. Securities

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

29. Dayworks

29.1 If applicable, the Dayworks rates in the Contractor's tender shall be used for small additional amounts of Work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

29.2 All work to be paid for as Dayworks shall be recorded by the Contractor on Forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the Work being done.

29.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

30. Liability and Insurance

30.1 From the Start Date until the Defects Correction Certificate has been issued, the following are the Employer's risks:

- (a) The risk of personal injury, death or loss of or damage to property (excluding the Works, Plant, Materials and Equipment), which are due to;
 - (i) Use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works, or
 - (ii) Negligence, breach of statutory duty or interference with any legal right by the Employer or by any person employed by or contracted to him except the Contractor.
- (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in Employer's design, or due to war or radioactive contamination directly affecting the place where the Works are being executed.

30.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is the Employer's risk except loss or damage due to;

- (a) A defect which existed on or before the Completion Date.
- (b) An event occurring before the Completion Date, which was not itself the Employer's risk
- (c) The activities of the Contractor on the Site after the Completion Date.

30.3 From the Start Date until the Defects Correction Certificate has been issued, the risks of personal injury, death and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Employer's risk are Contractor's risks.

The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts stated in the Appendix to Conditions of Contract for the following events;

- (a) Loss of or damage to the Works, Plant, and Materials;
- (b) Loss of or damage to Equipment;
- (c) Loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract, and
- (d) Personal injury or death.

- 30.4 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation required to rectify the loss or damage incurred.
- 30.5 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 30.6 Alterations to the terms of insurance shall not be made without the approval of the Project Manager. Both parties shall comply with any conditions of insurance policies.

31. Completion and taking over

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

32. Final Account

- 32.1 The Contractor shall issue the Project Manager with a detailed account of the total amount that the Contractor considers payable to him by the Employer under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 30 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a Payment Certificate. The Employer shall pay the Contractor the amount due in the Final Certificate within 60 days.

33. Termination

- 33.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following;
 - (a) The Contractor stops work for 30 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Project Manager;
 - (b) The Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
 - (c) The Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) A payment certified by the Project Manager is not paid by the Employer to the Contractor within 30 days (for Interim Certificate) or 60 days (for Final Certificate) of issue.

- (e) The Project Manager gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
 - (f) The Contractor does not maintain a security, which is required.
- 33.2 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under Clause 33.1 above, the Project Manager shall decide whether the breach is fundamental or not.
- 33.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 33.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible. The Project Manager shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

34. Payment Upon Termination

- 34.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the Work done and materials ordered and delivered to Site up to the date of the issue of the certificate. Additional liquidated damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable by the Contractor.
- 34.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the Work done, materials ordered, the reasonable cost of removal of equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works.
- 34.3 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on the Site, plant, equipment and temporary works.
- 34.4 The Contractor shall, during the execution or after the completion of the Works under this clause remove from the Site as and when required, within such reasonable time as the Project Manager may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to or hired by him, and in default the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.
Until after completion of the Works under this clause the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts therefore the Project Manager shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds

the total amount which would have been payable on due completion in accordance with this Contract the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

35. Release from Performance

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

36. Corrupt gifts and payments of commission

The Contractor shall not;

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

Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement Regulations issued under The Exchequer and Audit Act Cap 412 of the Laws of Kenya.

37. Settlement of Disputes

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

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

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

37.2 The arbitration may be on the construction of this Contract or on any matter or thing of whatsoever nature arising there under or in connection therewith, including any matter or thing left by this Contract to the discretion of the Project Manager, or the withholding by the Project Manager of any certificate to which the Contractor may claim to be entitled to or the measurement and valuation referred to in clause 23.0 of these conditions, or the rights and liabilities of the parties subsequent to the termination of Contract.

37.3 Provided that no arbitration proceedings shall be commenced on any dispute or difference where notice of a dispute or difference has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.

Notwithstanding the issue of a notice as stated above, the arbitration of such a dispute or difference shall not commence unless an attempt has in the first instance been made by the parties to settle such dispute or difference amicably with or without the assistance of third parties. Proof of such attempt shall be required.

Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:

1. The appointment of a replacement of Project Manager upon the said person ceasing to act.
2. Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
3. Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
4. Any dispute or difference arising in respect of war risks or war damage.

All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless the Employer and the Contractor agree otherwise in writing.

The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may, in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.

The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.

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

SECTION IV – APPENDIX TO CONDITIONS OF CONTRACT

THE EMPLOYER IS

Name: COUNTY GOVERNMENT OF BUSIA

Address: P.O. PRIVATE BAG BUSIA

Name of Authorized Representative COUNTY SECRETARY BUSIA COUNTY

Telephone:

Facsimile:

The Project Manager is

Name COUNTY ELECTRICAL ENGINEER

Address: BOX 470 BUSIA

Telephone: 0725205074

Facsimile:

The name (and identification number) of the Contract is CONSTRUCTION OF 30M HIGH MAST COMMUNITY LIGHTNING ARRESTERS IN BUSIA COUNTY

The Works consist of ELECTRICAL AND BUILDERS/CIVIL WORKS

The Start Date shall be AGREED WITH THE PROJECT MANAGER

The Intended Completion Date for the whole of the Works shall be 16 WEEKS FROM THE DATE OF POSSESSION.

The following documents also form part of the Contract:

.....

The Contractor shall submit a revised program for the Works within seven (7) days of delivery of the Letter of Acceptance.

The Site Possession Date shall be AGREED WITH THE PROJECT MANAGER

The Site is located WITHIN TESO NORTH SUBCOUNTY and is defined in drawings NOS.....

The Defects Liability period is 180 days.

Other Contractors, utilities etc., to be engaged by the Employer on the Site

Include those for the execution of;

1. NONE

The minimum insurance covers shall be;

1. The minimum cover for insurance of the Works and of Plant and Materials in respect of the Contractor's faulty design is KSH 1,000,000.00

2. The minimum cover for loss or damage to Equipment is **KSH 1,000,000.00**

3. The minimum cover for insurance of other property is **KSH 1,000,000.00**

4. The minimum cover for personal injury or death insurance

✓ For the Contractor's employees is **KSH. 300,000,00**

✓ And for other people is **KSH. 250,000.00**

The following events shall also be Compensation Events:

1. NONE (ONLY AS LISTED IN CLAUSE 24 OF THE CONDITIONS OF CONTRACT

- ✓ The period between Program updates is **14** days.
- ✓ The amount to be withheld for late submission of an updated Program is **KSH 10,000.00**
- ✓ The proportion of payments retained is **10%** percent.
- ✓ The Price Adjustment Clause **SHALL NOT** APPLY
- ✓ The liquidated damages for the whole of the Works is Kshs. **10,000.00** per week
- ✓ The Performance Security shall be for the following minimum amounts equivalent as a percentage of the Contract Price-**5%**-percent (%)
- ✓ The Completion Period for the Works is **16** Weeks
- ✓ The rate of exchange for calculation of foreign currency payments is

.....

The schedule of basic rates used in pricing by the Contractor is as attached [*Contractor to attach*].

Advance Payment **SHALL NOT** be granted.

The amount of bid bond for this tender will be specified in the tender advertisement

SECTION V - SPECIFICATIONS

Notes for preparing Specifications

1. Specifications must be drafted to present a clear and precise statement of the required standards of materials, and workmanship for tenderers to respond realistically and competitively to the requirements of the Employer and ensure responsiveness of tenders. The Specifications should require that all materials, plant, and other supplies to be permanently incorporated in the Works be new, unused, of the most recent or current models, and incorporating all recent improvements in design and materials unless provided otherwise in the Contract. Where the Contractor is responsible for the design of any part of the permanent Works, the extent of his obligations must be stated.
2. Specifications from previous similar projects are useful and may not be necessary to re-write specifications for every Works Contract.
3. There are considerable advantages in standardizing **General Specifications** for repetitive Works in recognized public sectors, such as highways, urban housing, irrigation and water supply. The General Specifications should cover all classes of workmanship, materials and equipment commonly involved in constructions, although not necessarily to be used in a particular works contract. Deletions or addenda should then adapt the General Specifications to the particular Works.
4. Care must be taken in drafting Specifications to ensure they are not restrictive. In the Specifications of standards for materials, plant and workmanship, existing Kenya Standards should be used as much as possible, otherwise recognized international standards may also be used.
5. The Employer should decide whether technical solutions to specified parts of the Works are to be permitted. Alternatives are appropriate in cases where obvious (and potentially less costly) alternatives are possible to the technical solutions indicated in tender documents for certain elements of the Works, taking into consideration the comparative specialized advantage of potential tenderers.
6. The Employer should provide a description of the selected parts of the Works with appropriate reference to Drawings, Specifications, Bills of Quantities, and Design or Performance criteria, stating that the alternative solutions shall be at least structurally and functionally equivalent to the basic design parameters and Specifications.

Such alternative solutions shall be accompanied by all information necessary for a complete evaluation by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, proposed construction methodology, and other relevant details. Technical alternatives permitted in this manner shall be considered by the Employer each on its own merits and independently of whether the tenderer has priced the item as described in the Employer's design included with the tender documents.

SECTION VI – DRAWINGS

Note1. A list of drawings should be inserted here

2. The actual drawings including Site plans should be annexed in a separate booklet.

SECTION VII - BILL OF QUANTITIES

Notes for preparing Bills of Quantities

1.0 The objectives of the Bills of Quantities are;

- (a) To provide sufficient information on the quantities of Works to be performed to enable tenders to be prepared efficiently and accurately; and
- (b) When a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

2.0 The Bills of Quantities should be divided generally into the following sections:

(a) Preliminaries.

The preliminaries should indicate the inclusiveness of the unit prices, and should state the methods of measurement which have been adopted in the preparation of the Bill of Quantities and which are to be used for the measurement of any part of the Works.

The number of preliminary items to be priced by the tenderer should be limited to tangible items such as site office and other temporary works, otherwise items such as security for the Works which are primarily part of the Contractor's obligations should be included in the Contractor's rates.

(b) Work Items

- (i) The items in the Bills of Quantities should be grouped into sections to distinguish between those parts of the Works which by nature, location, access, timing, or any other special characteristics may give rise to different methods of construction, or phasing of the Works, or considerations of cost. General items common to all parts of the Works may be grouped as a separate section in the Bill of Quantities.
- (ii) Quantities should be computed net from the Drawings, unless directed otherwise in the Contract, and no allowance should be made for bulking, shrinkage or waste. Quantities should be rounded up or down where appropriate.
- (iii) The following units of measurement and abbreviations are recommended for use.

Unit	Abbreviation	Unit	Abbreviation
cubic meter	m ³ or cu m	millimeter	mm
hectare	ha	month	mon
hour	h	number	nr
kilogram	kg	square meter	m ² or sq m
lump sum	sum	square millimeter	mm ² or sq mm
meter	m	week	wk
metric ton (1,000 kg)	t		

- (iv) The commencing surface should be identified in the description of each item for Work involving excavation, boring or drilling, for which the commencing surface is not also the original surface. The excavated surface should be identified in the description of each item for Work involving excavation for which the excavated surface is not also the final surface. The depths of Work should be measured from the commencing surface to the excavated surface, as defined.

(c) Daywork Schedule

A Daywork Schedule should be included if the probability of unforeseen work, outside the items included in the Bill of Quantities, is relatively high. To facilitate checking by the Employer of the realism of rates quoted by the tenderers, the Daywork Schedule should normally comprise:

- (i) a list of the various classes of labour, and materials for which basic Day work rates or prices are to be inserted by the tenderer, together with a statement of the conditions under which the Contractor will be paid for Work executed on a Day work basis; and
- (ii) a percentage to be entered by the tenderer against each basic Day work Subtotal amount for labour, materials and plant representing the Contractor's profit, overheads, supervision and other charges.

(d) Provisional Quantities and Sums

- (i) Provision for quantity contingencies in any particular item or class of Work with a high expectation of quantity overrun should be made by entering specific "Provisional Quantities" or "Provisional Items" in the Bill of Quantities, and *not* by increasing the quantities for that item or class of Work beyond those of the Work normally expected to be required. To the extent not covered above, a general provision for physical contingencies (quantity overruns) should be made by including a "Provisional

Sum” in the Summary of the Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a “Provisional Sum” in the Summary of the Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises.

- (ii) Provisional sums to cover specialized works normally carried out by Nominated Sub Contractors should be avoided and instead Bills of Quantities of the specialized Works should be included as a section of the main Bills of Quantities to be priced by the Main Contractor. The Main Contractor should be required to indicate the name (s) of the specialized firms he proposes to engage to carry out the specialized Works as his approved domestic sub-contractors. Only provisional sums to cover specialized Works by statutory authorities should be included in the Bills of Quantities.

(e) Summary

The Summary should contain a tabulation of the separate parts of the Bills of Quantities carried forward, with provisional sums for Daywork, for physical (quantity) contingencies, and for price contingencies (upward price adjustment) where applicable.

SECTION VIII – STANDARD FORM

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

FORM OF INVITATION FOR TENDERS

_____ [date]

To: _____ [name of Contractor]
_____ [address]

Dear Sirs:

Reference: _____ [Contract Name]

You have been prequalified to tender for the above project.

We hereby invite you and other prequalified tenderers to submit a tender for the execution and completion of the above Contract.

A complete set of tender documents may be purchased by you from _____

_____ [mailing address, cable/telex/facsimile numbers].

Upon payment of a non-refundable fee of Kshs _____

All tenders must be accompanied by _____ number of copies of the same and a security in the form and amount specified in the tendering documents, and must be delivered to _____

_____ [address and location]

at or before _____ (time and date). Tenders will be opened immediately thereafter, in the presence of tenderers' representatives who choose to attend.

Please confirm receipt of this letter immediately in writing by cable/facsimile or telex.

Yours faithfully,

_____ Authorised Signature

_____ Name and Title

FORM OF TENDER

TO: _____ [Name of Employer]

_____ [Date]

_____ [Name of Contract]

Dear Sir,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of Kshs.

_____ [Amount in figures] Kenya

Shillings _____
_____ [Amount in words]

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

We agree to abide by this tender until _____ [Insert date], and it shall remain binding upon us and may be accepted at any time before that date.

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

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

Dated this _____ day of _____ 20 _____

Signature _____ in the capacity of _____

duly authorized to sign tenders for and on behalf of

_____ [Name of Employer]

of _____ [Address of Employer]

Witness; Name _____

Address _____

Signature _____

Date _____

LETTER OF NOTIFICATION

[Letterhead paper of the Head of procurement]

_____ [date]

To: _____

[Name of the Contractor]

_____ [address of
the Contractor]

Dear Sir,

This is to notify you that your Tender dated _____

for the execution of _____

[Name of the Contract and identification number, as given in the Tender documents] for the

Contract Price of Kshs. _____ [amount in figures] [Kenya

Shillings _____ (amount in words)] in accordance with the
Instructions to Tenderers is hereby accepted.

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

Authorized Signature

Name and Title of Signatory

Attachment: Agreement

“ DRA FT CO PY “

ACCEP T AN CE LETT ER (T O BE USED ON CLIE N T ’S LET T
ER HEA D) M/S

.....
.....

Dear Sir, Date
RE:

.....
Your tender dated amounting to Kenya shillings
..... is hereby accepted,
subject to there being no appeal in the ensuing (14) fourteen days from the date of this letter,
in line with the provisions of clause 33(1) of the Public Procurement Regulations.
The Contract Documents are in the course of preparation and will be ready for your signature
after the said 14 days.
You will be required to provide an acceptable performance bond and approved works program
before the contract is signed.
The duration of this contract will be (....) calendar weeks from the date of
commencement which will be communicated to you by the Project Manager.
The County Electrical Engineer is hereby appointed ‘Project Manager’ in connection with the
Project.
Please communicate with the Project Manager immediately and thereafter on all matters
relating to this contract.

Yours faithfully,
Authorized Signatory.....

CHIEF OFFICER I T & E
COUNTY ELECTRICAL ENGINEER I T E & DM

CONTRACT/FORM OF AGREEMENT

Whose registered office is situated at] _____
(herein after called "the Employer") of the one part AND
_____ of [or whose registered office is situated at]

(herein after called "the Contractor") of the other part.

WHEREAS THE Employer is desirous that the Contractor
executes _____

—
(name and identification number of Contract) (herein after called "the Works") located
at _____ [Place/location of the Works] and the Employer has
accepted the tender submitted by the Contractor for the execution and completion of such
Works and the remedying of any defects therein for the Contract Price of
Kshs _____ [Amount in figures], Kenya
Shillings _____ [Amount in words].

NOW THIS AGREEMENT WITNESSETH as follows:

In this Agreement, words and expressions shall have the same meanings as are respectively
assigned to them in the Conditions of Contract hereinafter referred to.

The following documents shall be deemed to form and shall be read and construed as part of
this Agreement i.e.

- Letter of Acceptance
- Form of Tender
- Conditions of Contract Part I
- Conditions of Contract Part II and Appendix to Conditions of Contract
- Specifications
- Drawings
- Priced Bills of Quantities

In consideration of the payments to be made by the Employer to the Contractor as hereinafter
mentioned, the Contractor hereby covenants with the Employer to execute and complete the
Works and remedy any defects therein in conformity in all respects with the provisions of the
Contract.

The Employer hereby covenants to pay the Contractor in consideration of the execution and
completion of the Works and the remedying of defects therein, the Contract Price or such other
sum as may become payable under the provisions of the Contract at the times and in the
manner prescribed by the Contract.

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

The common Seal of _____
Was hereunto affixed in the presence of _____
Signed Sealed, and Delivered by the said _____
Binding Signature of Employer _____
Binding Signature of Contractor _____
In the presence of _____

(i) Name _____
Address _____
Signature _____
[ii] Name _____
Address _____
Signature _____

FORM OF TENDER SECURITY

WHEREAS (herein after called "the Tenderer") has submitted his tender dated for the construction of

.....

..... (*name of Contract*)

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

THE CONDITIONS of this obligation are:

If after tender opening the tenderer withdraws his tender during the period of tender validity specified in the instructions to tenderers

Or

If the tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:

fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or

fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

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

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

[date]

[signature of the Bank]

[witness]

PERFORMANCE BANK GUARANTEE

To: _____ (Name of Employer) _____ (Date)
_____ (Address of Employer)

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

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Kshs. _____ (*amount of Guarantee in figures*) Kenya Shillings _____ (*amount of Guarantee in words*), and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Kenya Shillings _____ (*amount of Guarantee in words*) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification. This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR _____
Name of Bank _____
Address _____
Date _____

BANK GUARANTEE FOR ADVANCE PAYMENT

To: _____ [name of Employer] _____ (Date)

____ [address of Employer]

Gentlemen,

Ref: _____ [name of Contract]

In accordance with the provisions of the Conditions of Contract of the above-mentioned

Contract, We, _____ [name and Address of Contractor]

(hereinafter called "the Contractor") shall deposit with

_____ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of

Kshs. _____ [amount of Guarantee in figures] Kenya

Shillings _____ [amount of Guarantee in words].

We, _____ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on his first demand without

whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs _____ [amount of Guarantee in figures]

Kenya Shillings

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

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between _____ [name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

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

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until

_____ (name of Employer) receives full payment of the same amount from the Contract.

Yours faithfully,

Signature and Seal _____

Name of the Bank or financial institution _____

Address _____

Date _____

Witness: Name: _____ Address: _____

Signature: _____

Date: _____

QUALIFICATION INFORMATION

1. Individual Tenderers or Individual Members of Joint Ventures

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

Place of registration: _____

Principal place of business _____

Power of attorney of signatory of tender _____

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

Year	Volume	
	Currency	Value

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

Project Name	Name of client & contact person	Type of work performed & year of completion	Value of contract

1.4 Major items of Contractor's Equipment proposed for carrying out the Works.

List all information requested below.

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

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

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

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

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

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

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

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

2 Joint Ventures

- 2.4 The information listed in 1.1 – 1.10 above shall be provided for each partner of the joint venture.
- 2.5 The information required in 1.11 above shall be provided for the joint venture.
- 2.6 Attach the power of attorney of the signatory(ies) of the tender authorizing signature of the tender on behalf of the joint venture

- 2.7 Attach the Agreement among all partners of the joint venture (and which is legally binding on all partners), which shows that:
 - a) All partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
 - b) One of the partners will be nominated as being in charge, authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture; and
 - c) The execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

TENDER QUESTIONNAIRE

Please fill in block letters.

1. Full names of tenderer

.....

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

.....

3. Telephone number (s) of tenderer

.....

4. Telex address of tenderer

.....

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

.....

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

.....

.....

Signature of Tenderer

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

CONFIDENTIAL BUSSINESS QUESTIONNAIRE

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

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

Part 1 – General

Business Name
Location of business premises; Country/Town.....
Plot No..... Street/Road
Postal Address..... Tel No.....Nature of
Business.....
Current Trade License No..... Expiring date.....
Maximum value of business which you can handle at any time: K. pound.....
Name of your
bankers.....Branch.....

Part 2 (a) – Sole Proprietor

Your name in full..... Age.....
Nationality..... Country of Origin.....
*Citizenship details

Part 2 (b) – Partnership

Give details of partners as follows:

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

Part 2(c) – Registered Company: Private or

public.....

State the nominal and issued capital of the Company-

Nominal Kshs.....

Issued Kshs.....

Give details of all directors as follows:

Name in full.	Nationality.	Citizenship Details*.	Shares.
1.....			
2.....			
3.....			
4.....			

Part 2(d) – Interest in the Firm:

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

I certify that the information given above is correct. (Title).....

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

STATEMENT OF FOREIGN CURRENCY REQUIREMENTS

(See Clause 23] of the Conditions of Contract)

In the event of our Tender for the execution of _____
_____ (name of Contract) being accepted, we would require in accordance with Clause 21 of the Conditions of Contract, which is attached hereto, the following percentage:

(Figures)..... (Words).....

of the Contract Sum, (Less Fluctuations) to be paid in foreign currency.

Currency in which foreign exchange element is required:

.....

Date: The Day of 20.....

Enter 0% (zero percent) if no payment will be made in foreign currency.

Maximum foreign currency requirement shall be _____ (percent) of the Contract Sum, less Fluctuations.

(Signature of Tenderer)

DETAILS OF SUB-CONTRACTORS

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

Failure to comply with this requirement may invalidate the tender.

(1) Portion of Works to be sublet:

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

.....

Sub-contractor's experience of similar works carried out in the last 3 years with

Contract value:

(2) Portion of Works to sublet:

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

.....

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

.....

[Signature of Tenderer]

Date

LETTER OF NOTIFICATION OF AWARD

Address of Procuring Entity

To: _____

RE: Tender No. _____

Tender Name

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

Please acknowledge receipt of this letter of notification signifying your acceptance.

The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.

You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

(FULL PARTICULARS) _____

SIGNED FOR ACCOUNTING OFFICER

**SPECIFICATIONS
OF
ELECTRICAL MATERIALS AND WORKS**

PARTICULAR SPECIFICATIONS

1.1 Extent of the works

- ✓ The works to be carried out include the supply, delivery, installation, testing, commissioning and leaving in servicing condition the complete installation as herein described in the Bills of Quantities and general specification. The works shall include, but not limited to the supply and installation of the following: -
- ✓ Lighting fitting
- ✓ Power points
- ✓ Provision of outlets points for Telephone

1.1 Regulation and standard

The works shall comply with the provisions of the following as necessary and relevant:

- Electric Power Act
- Kenya Bureau of Standards (KBS)
- Institution of Electrical Engineers (I.E.E) Wiring Regulations Current recommendation of CCITT and CCIR

1.2 Electrical Requirements

The equipment to be supplied shall be capable of being operated from 240V AC 50HZ power supply.

GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

- 2.1 General
- 2.2 Standard of materials
- 2.3 Workmanship
- 2.4 Procurement of materials
- 2.5 Shop Drawings
- 2.6 Record Drawings
- 2.7 Regulation and standards
- 2.8 Setting out works
- 2.9 Position of Electrical plant and Apparatus
- 2.10 M.C.B Distribution panels and consumer units
- 2.11 Fused switchgear and isolators
- 2.12 Conduits and conduit Runs
- 2.13 Conduit Boxes and Accessories
- 2.14 Labels
- 2.15 Ear thing
- 2.16 Cables and Flexible Cords
- 2.17 Armored PVC Insulated and sheathed Cables
- 2.18 Cable supports; Makers and Tiles
- 2.19 PVC Insulated cables
- 2.20 Heat Resisting Cables
- 2.21 Flexible Cord
- 2.22 Cable Ends and phase Colors
- 2.23 Cable Insulation Colors
- 2.24 Sub-circuit wiring
- 2.25 Space Factor
- 2.26 Insulation
- 2.27 Lighting switches
- 2.28 Sockets and switched sockets
- 2.29 Fused spur Boxes
- 2.30 Cooker outlets
- 2.31 Connectors
- 2.32 Lamp holders
- 2.33 Testing on site
- 2.34 Appendix to general specifications of materials and works.
- 3.0 Measured works
- 3.1 Grand summary
- 3.2 Pre-contract conditions

2.1 GENERAL

This specification is to be read in conjunction with the drawings which are issued with it. Bills of Quantities shall be basis of all additions and omissions during the progress of the works.

2.2 STANDARD OF MATERIALS

Where the materials 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 sub – contractor shall adhere.

Should the sub – contractor install any material not specified herein before receiving approval from the proper authorities, the Engineer shall direct the sub-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 sub-contractor. All materials required for the works shall be new and the best of the respective kind and shall be of a uniform pattern.

2.3 EXCAVATION AND EARTHWORK

Site Clearance

Site clearance shall include the cutting down of all trees, stumps, bushes, vegetation and rubbish, burning the debris arising in approved locations and carting remaining material to a tip provided by the Contractor.

Nature of the Soil

The Contractor is advised to visit the site and ascertain the nature of the ground to be excavated and he shall price accordingly and no claim will be allowed for want of knowledge in this respect.

Rates for excavation shall include for excavation in soil, earth, black cotton, sandy soil, murram, tuff, soft rock, boulders or whatever other subsoil is encountered except hard rock as defined below.

Foundation Excavations

- a) The foundation trenches and column bases shall be excavated to the widths and depths of the concrete foundations shown on the drawings or to such widths and depths as the Engineer may instruct after examination of the excavations. Quantities of all excavations shall be measured and valued by the Quantity Surveyor and any difference between such measurements and the measurements herein given shall be dealt with as a variation to the Contract.

If however, the Contractor excavates to any greater depths than shown in the drawings or as instructed by the Engineer, then he shall at his own expense fill in such extra depth of excavation with concrete as specified for the foundations to the satisfaction of the Engineer.

The Contractor shall not be paid for the cost of any excavation executed deeper or wider than shown on the drawings or instructed by the Engineer nor the cost of back filling such excavation or disposing of surplus.

Surplus Soil Disposal

Excavated material not required for subsequent refilling shall be removed to areas off site which shall be approved by the Architect.

Top Soil for Spreading

where required in the Bills of Quantities, top soil required for subsequent spreading over finished work shall be especially selected and shall be dumped in special heaps as indicated by the Architect. Such top soil shall be reasonably free from vegetation to the satisfaction of the Architect and shall be compacted as little as possible in the heaps.

Filling under Surface Beds in Buildings

i) Murram fillings

Murram for filling as base course shall be from an approved source and of the highest quality. It shall be laid in layers not less than 150mm thick and not greater than 230mm thick prior to Compaction. Water will be applied to O.M.O and each layer will be thoroughly compacted by at Least 8 passes of a 10tonne smooth wheeled roller or a 2tonne vibrating roller until all Movement ceases and 100% C.B.R is obtained.

i) Hardcore filling

Hardcore filling shall be crushed rock, broken concrete or other approved hard granular Materials broken to pass not greater than a 150mm ring or to be 75% of the finished thickness of the layers being compacted whichever is the less and graded so that it can be easily and thoroughly compacted by rolling. The filling is to be laid in layers each of a consolidated thickness not exceeding 230mm.

Anti-termite treatment

Where described the top surface of filling shall be treated with Gladiator T C Pesticides to be supplied and applied by Rentokil Ltd P O Box 44360, Nairobi or other equal and approved firm strictly in accordance with the satisfaction of the Architect. The Contractor must destroy any termite nests found within the perimeter of the building and within 20 meters from the building externally and take out and destroy queens, impregnate holes and tunnels with approved insecticide and backfill with hard material, well rammed and consolidated. The specialist shall be required to issue a 10 year guarantee to the Employer.

Polythene Sheeting

Polythene sheeting shall be produced by an approved manufacturer. Joints in sheeting shall be treble folded with a 150mm fold and taped at 300mm intervals with 50mm wide black plastic adhesive tapes. The sheeting shall not stretch but shall be laid with sufficient wrinkles to permit shrinkage up to 15%.

The Contractor shall ensure that the membrane is not pierced by laying and concreting.

Existing Services

Before commencing works, the Contractor shall at his own expense ascertain in writing from the relevant Local Authorities and all other Public bodies, companies and persons who may be affected, the position and depths of their respective ducts, cables, mains or pipes and appurtenance. He shall thereupon search for and locate such services.

Active existing services shall be adequately protected from damage or relocated as directed by the Architect. Inactive services shall be removed or sealed off in accordance with the direction of the Architect.

Protection

The Contractor shall protect all graded and filled areas from the actions of the elements. Any settlement or washing away that occur prior to acceptance of the works shall be repaired and grades re-established to the required elevations and slopes.

2.4 CONCRETE WORK

Codes of Practice

All workmanship, materials, tests and performances in connection with reinforced concrete shall be in conformity with the latest edition of the British Standard for concrete works BS 8110 parts 1 & 2, BS 8004, BS 8007) and any other approved Local and International Standards. Where inconsistency exists between these preambles and these Standards, the Contractor shall notify the Engineer in good time for his Clarification as to which of the two implications on the Contract.

Supervision

A competent person approved by the Engineer shall be employed by the Contractor whose duty will be to supervise all stages in the preparation and placing of the concrete. All cubes shall be made and site tests carried out under his direct supervision on Consultation with the Engineer.

Cement

Cement unless otherwise specified shall be ordinary Portland Cement of a brand and source approved by the Engineer and shall comply with the requirements of K.S. 02-21. a manufacturers certificate of test in accordance with K.S. 02-21 shall be supplied for each consignment delivered to the Site.

Aggregate

Aggregates shall conform with the requirement K.S. 02 – 95 and all the proposed sources, Types and grading test results of all aggregates are to be approved in all respects by the Engineer before work commences.

If in the opinion of the Engineer the aggregate meets with the above requirements but is dirty or adulterated in any manner it shall be screened and/or washed with clean water at the Contractors expense.

Aggregate shall be delivered to the Site in their prescribed sizes or gradings and shall be stock-piled on paved areas to boarded platforms in separate units to avoid intermixing. On no account shall pre-mixed cores aggregates be brought to the patching plant. On no account shall aggregates be stock-piled on the ground.

Water

The water used for mixing concrete shall be from an approved source, clean, fresh and free from harmful matter and comply with the requirements of B.S. 3148.

Quality Control at Work Stage

Once the concrete mix is accepted from preliminary to works stages, the principal bases if control shall be analysis of the cube test results at 28 days.

Cement

The Quantity of cement shall be measured by weight. Where delivered in bas, each batch of concrete is to contain one or more bags of cement in accordance with the proportions specified.

For non-structural concrete, volume batching may be used as indicated below: -

Class of concrete	15	10
Nominal mix by volume	1:3:6	1:4:8
Cubic meters of fine aggregate		
Per 50kg. bag of cement	0.12	0.16
Cubic meters of coarse aggregate		
Per 50kg bag of cement	0.24	0.32
Max. size of coarse aggregate	40mm* 40mm*	

*or 20mm for blinding concrete where described.

Where batching is by volume, approved gauge boxes of such a size as will give the correct proportions shall be used, and full account shall be taken of bulking due to high moisture content.

Construction Joints

Construction joints shall be permitted only at the positions predetermined on the drawings or as instructed on the site by the Engineer. In general, they shall be located at points of minimum shear, viz, vertical at, or near micspans of slabs, ribs and deems.

Faulty Concrete

Any concrete which fails to comply with these Preambles, or which shows signs or setting before it is placed shall be taken out and removed from the site, where concrete is found to be defective after it has set the concrete shall be cut out and replaced in accordance with the Engineers instructions. On no account shall any faulty honey combed, or otherwise

defective concrete be repaired or patched until the engineer has made an inspection and issued instruction for the repair.

Steel reinforcement

The steel reinforcement shall comply with the latest requirements of the following British Standards:

Hot rolled MS for the Reinforcement of concrete	KS 02 – 22
Hot rolled MS for the Reinforcement of concrete	KS 4449
Cold worked H.Y steel for the Reinforcement of concrete	BS 4461
Hard drawn steel wire	BS 4482

Fabric Reinforcement

Fabric reinforcement shall be electrically cross-welded steel wire mesh reinforcement to B.S 4483 and of the size and weight specified and made of wire to B.S 4482.

Fixing Steel Reinforcement

Reinforcement shall be accurately bent to the shapes and dimensions shown on the Drawings and Schedules and in accordance with B.S 4466 and B.S 8110. Reinforcement must be cut and bent cold and no welded joints will be permitted unless to detailed or directed by the Engineer.

Formwork

The method and system of formwork which the Contractor proposed to use shall be approved by the Engineer before construction commences. Formwork shall be substantially and rigidly constructed of timber, steel, plastic, precast concrete or other approved material.

All timber formwork shall be good, sound, clean, sawn, well – seasoned timber free from warps and loose knots and of scantlings sufficiently strong for their purpose.

2.5 METAL WORK

MATERIALS

Generally

All materials shall be best for their respective kinds free from defects and all work is to be carried out in the most workmanlike manner and strictly as directed by the Architect. The materials in all stages of transportation, handling and stacking shall be kept clean and prevented from injury by breaking, bending or distortion and weather action.

Mild Steel

Mild steel shall comply with B.S 15

Hollow Section Tubing

Square and rectangular hollow section tubing shall be hot rolled mild steel in accordance with Grade 43C of B. S 4360.

Bolts, Nuts and Washers

These shall be fabricated from materials which comply with B. S 15 and each manufactured item shall comply with the appropriate B. S.

Galvanized Sheet Steel

To be No. 24 S.W.G. of approved manufacture to B.S 2989 of quality mild steel sheets cold rolled close annealed patent flattened and hot dip galvanized.

Stainless Steel

Stainless steel tube shall be Austenic Steel B. S comparable to B. S. 1449 Type 316 S 16

Steel Grills

Steel Grills shall be manufactured from section conforming with B.S 990 of heavy duty sections of the metric W20 range of approved manufacturer and design approved by the Architect.

After manufacture and before delivery to site steel windows are to be hot galvanized by dipping in a bath of molten zinc or painted with one coat primer.

Welding

All welding is to be in accordance with the requirements with the requirements of B.S.1856 and 938 the electrodes shall comply with b.s. 639.

Painting

All steel is to be wire brushed and any loose scale, dirt or grease shall be removed before any painting is commenced. One coat of red oxide primer type A to B.S. 2523 shall be applied at the shop.

Any damage to the printing paint shall be made good to the Architects satisfaction.

Fixing of Steel Grilles

Fixing of metal grilles shall include for assembling and fixing, including screwing to sub-frames or cutting mortices for lugs in concrete or walling and running with cement mortar 91:4), bedding frames in similar mortar, pointing in mastic, bedding sills, transoms and mullions in mastic, making good finishing around both sides and fixing, and adjusting all fittings and frames.

2.6 PAINTING AND DECORATING**MATERIALS****Colour range**

Painting and decorative schemes shall be carried out in colours selected by the Architect from the approved range of colours.

Approval of brands

The Contractor shall seek, in writing, approval from the Architect for all brands of paint he wishes to use.

Quality of Products

Where a type of paint is produced by the Manufacturer in more than one quality, only paints and materials of the first or best quality shall be used in the works. The container label shall indicate clearly the quality of the paint being used.

Where it is not evident that the first or best quality of paint is being used, the Architect will order the removal of such materials from the site and rectification of any work executed with those materials, all at the Contractor's expense.

Some makers' materials used for coating

While materials for the work may be obtained from several makers, undercoats and finishing coats for a particular surface must be obtained from the same maker, (i.e. one maker's undercoat).

Remedying defects due to defective materials

All materials, which in the opinion of the Architect are unsatisfactory shall be immediately removed from the site and any work executed with such defective materials shall be made good by the Contractor, at his expense, to the satisfaction of the Architect.

Emulsion paint

Emulsion paint (interior and/or exterior), shall have a P.V.A base and shall be of an approved brand.

The first coat shall be thinned in accordance with the manufacturer's instructions. Where described as applied externally, the paint shall incorporate an approved fungicide to prevent fungus growth.

Black Bituminous paint

Black bituminous paint shall comply with B.S. 3416, Type 1 for general use, Type ii for drinking water tanks

Primer for iron and steelwork

Primer for iron and steelwork shall be: -

- (a) Lead based priming paint complying with B.S 2523, Type B.
- (b) Calcium plumbate priming paint complying with B.S 3698, Type A

Primer for woodwork

Primer for internal woodwork, other than the internal surfaces of external doors, windows and their frames and backs of frames and linings, etc. in contact with masonry, concrete or plaster, shall be leadless white or light grey priming paint not darker than 9 – 093 of B.S 4800 which shall be compatible with the subsequent coats and obtained from the same maker.

Oil paints

Hard gloss, semi-gloss matt and flat oil paints, and respective undercoats, shall be approved quality, as appropriate.

Polyurethane lacquer

Polyurethane lacquer shall be an approved single pack, or two pack lacquer as described of interior or exterior quality, as appropriate.

Plaster, rendering, concrete blockwork and brickwork

All plaster or mortar splashes, etc. shall be removed from plaster rendering, concrete, block work and brickwork by careful scraping; all holes, cracks etc., shall be stopped and the whole of the surfaces shall be brushed down to remove dust and loose materials. In addition, all traces of mould oil shall be removed from concrete surfaces by scrubbing with water and detergent and rinsing with clean water to remove all detergent.

Iron and steel

Before fixing, all rust and scale shall be removed from iron and steel surfaces by wire-brushing, scraping, hammering, flame cleaning etc.

Hardwood

All dirt and grease shall be removed from hardwood surfaces. After priming, all nail holes and other imperfections shall be stopped.

Fibreboard

All dirt shall be brushed off from fibreboard surfaces. After priming all nail holes and other imperfections shall be stopped.

2.7 WORKMANSHIP

The workmanship and method of installation shall conform to the best standard practice. All work shall be performed by a skilled tradesman 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 practice will be removed and reinstated at the sub-contractors' 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.

2.8 PROCUREMENT OF MATERIALS

The sub-contractor is advised that no assistance can be given in the procurement or allotment of any materials or products to be used in and necessary for the construction and completion of the work.

Sub – contractors are warned that they must make their own arrangements for the supply of materials and/or products specified or required.

2.9 SHOP DRAWINGS

Before manufacture or fabrication is commenced the sub-contractor shall submit two copies of detailed drawings of all control pillars, meter cubicles, medium voltage switchboards including their components showing all pertinent information including sizes, capacities, construction details, etc. as maybe required to determine the suitability of the equipment for the approval of the Engineer. Approval of the detailed drawings shall not relieve the sub-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.

2.10 RECORD DRAWINGS

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

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 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.

2.11 REGULATIONS AND STANDARDS

All work executed by the sub-contractor shall comply with the current edition of the “Regulations” for the Electrical Equipment of Buildings, issued by the institution of Electrical Engineers, and with the Regulations of the Local Electricity Authority.

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

2.12 SETTING OUT WORK

The sub- 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 in his tender for all such modifications and for the provision of any such sketches or drawings related thereto.

2.13 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 the cables must be agreed on site with the Engineer before any work is carried out.

2.14 MCB DISTRIBUTION PANELS AND CONSUMER UNITS

All cases of MCB panels and consumer units shall be constructed in heavy gauge sheet with hinged covers. Removable undrilled gland plates shall be provided on the top and bottom of the cases. Miniature circuit breakers shall be enclosed in molded plastic with the tripping mechanism and arc chambers separated and sealed from the cable terminals.

The operating dolly shall be trip free with appositive 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 variation in ambient temperature.

A locking plate shall be provided for each size 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 fitted 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: Ivory labels shall be secured to the insulation barriers in such a manner as to indicate the number of 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 the bars when installed.

2.15 POSITIONS OF ELECTRICAL PLANT AND APPARATUS

The routes of cables and approximate position 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 the engineer before any work is carried out.

2.16 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 KS04-179:988 and IEE Regulation. No conduits 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 Sub- Contractor/Main-Contractor's attention is 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 conduit systems 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 plugged with well-fitting plugs and when short conduit pieces are used as plugs, they shall be doubled over and tied firmly together with steel wire; before wiring all conduit systems shall be carried out until the particular section of the conduit installation is completed 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 and non-screwed boxes, care shall be taken that no rough edges of conduit stick out into boxes.

Run between draw in boxes are not to have more than two right angle bends or their Equivalent. The Sub-Contractor/Main-Contractor may be required to demonstrate to the Engineers that wiring in any particular run is easily with draw able and She/he may at no extra Cost to the contract; be required to install additional draw-in boxes required. If a conduit is installed in straight runs in excess of 6000mm; expansion coupling as manufactured by E.g. a tube Shall be used at intervals of 600mm.

Where conduit runs are to be concealed in pillars and beams, the approval of the structural Engineer, shall be obtained. The Sub-Contractor/Main Contractor shall be responsible for marking the accurate position of all holes, chases etc., on site or if the Engineer so directs, shall Provide the Main Contractor with dimensional drawings to enable him to mark out and form all Holes chases. Should the sub – Contractor fail to inform the Main contractor of any inaccuracies in this respect they shall be rectified at the sub-contractor's expenses.

It will be the sub –contractor's responsibility to ascertain from site, details of reinforced Concrete or structural steelwork and check from the builder's drawings the positions of walls, Structural concrete and finishes. No reinforced concrete or structural steelwork may be drilled without First obtaining the written permission of the structural Engineer.

The drawings provided with these specifications indicate the appropriate positions only of points and switches and it shall be the Sub-Contractors responsibility to mark out and Centre on Site the accurate positions where necessary in consultation with the Architect and Engineer.

The sub-contractor alone shall be responsible for the accuracy of the final position.

2.17 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 super high impact PVC Manufactured to KS04-179:1983.

Small circular pattern boxes are to be used with conduits up to and including 25mm outside diameter. Rectangular pattern adaptable boxes are to be used for conduit 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 sub-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 of square or oblong shape location. They Shall be of square or oblong shape complete with lids secured by four 2BA brass roundhead screws No adaptable box shall be less than 75mm*75mm*50mm or larger than 300mm*300mm*75mm and shall be adequate in depth in relation to the size of conduit Entering it. Conduits shall only enter boxes by means of conduit bushes.

2.18 LABELS

Labels fitted to switches and fuse boards;

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

2.19 EARTHING

The earthing of the installation shall comply with the following requirement;

- (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 Engineer of Great Britain.
- (ii) At all Main distribution panels and Main service positions a 25mm*3mm Minimum cross sectional area of copper tape shall be provided and all Equipment including the lead sheath and armoring of cables, distribution Boards and metal frame shall be bonded thereto.
- (iii) The earth tape in sub-clause[ii]shall be connected by means 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. 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. Ear thing 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.
- (vi) Where an earth rod is specified [see sub –clause (iii) it shall be proprietary manufacture, Solid hard drawn copper of 15mm diameter driver into the ground to a minimum depth of 3.6m. It shall be made up to 1.2m sections with interval Screw and socket joints and fitted with hardened steel tip and driving cap.
- (vii) Earth plates will not be permitted. Where an earth rod is used the earth resistance shall be tested in the manner Described in the current edition of the IEE Regulations, the sub-contractor/main- Contractor shall be responsible for the supply of all TEST EQUIPMENTS.
- (viii) Where copper tape is fixed to the building structure it shall be by means Of purpose made non-ferrous saddles which spaces the conductor away from the Structure a minimum distance of 20mm. fixings shall be made using purpose Made plugs; No fixing requiring holes to be drilled through the tape will be accepted.
- (ix) Joints in copper tape shall be tinned before assembly riveted with a Minimum of two copper rivets and seated solid.
- (x) Where holes are drilled in the earth tape for connections to items of Equipment the effective cross-sectional area must not be less than required to Comply with these regulations
- (xi) Bolts, nuts and washers for any fixing to the earth tape must be of non-ferrous Material.
- (xii) Attention is drawn to the need for the ear thing metal parts of lighting fittings and for bonding ball joint suspension in lighting fittings.

2.20 CABLES AND FLEXIBLE CORDS

All cables used in this sub-contract /contract shall be manufactured in accordance with the current appropriate Kenya standard specifications which are as follows: -

- | | |
|---|---------------|
| - PVC insulated cables and flexible cords | KS04-192:1988 |
| - PVC insulated armored cables | KS04-194:1990 |
| - Armoring of electric cables | KS04-290:1987 |

The successful Sub-Contractor/Main-Contractor will, at the Engineers discretion be Required to submit sample of cables for the Engineers reserves the right to call for The cables of an alternative manufacture without any extra cost being incurred.

P.V.C insulated cables shall be 500/1000v grade. No cables smaller then 1.5mm² shall be used unless otherwise specified. The installation and the finish of cables shall be as detailed in later clauses. The color of cables shall conform with the details stated in the "Cable Braid and insulation colours" clause.

2.21 ARMoured P.V.C INSULATED AND SHEATHED CABLES:

Shall be 600/1000v grade manufactured to KS 04-194:1988 and KS 04-187/188 with copper stranded conductors The wire armor Of the cable shall be used wholly as an earth continuity conductor And the resistance of the wire armor shall have a resistance not more than twice of The largest current carrying conductor of the cable P.V.C/S.W.A/P.V.C cables shall be terminated using "Telecom" "B" type or approved Equal or approved equal glands and a P.V.C tapered sleeve shall be provided to Shroud each gland.

Where cables rise from floor level to switchgear etc. they shall be protected by P.V.C Conduit, to a height of 600mm from finished floor level whether the cables are run on the surface or recessed into the wall.

2.22 CABLE SUPPORTS, MARKERS AND TILES

All PVC/SWA/PVC cables run inside the building shall be fixed by studs and back nuts to their channel Sections.

Alternatively, fixing shall be by BICC law 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 dusts by raw bolts.

In excessively damp or corrosive atmosphere condition special finishes may be and the sub – contractor/ main contractor shall apply to the engineer for further instructions before ordering cleats and channels for such 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 sub-contract. Saddles shall not be used for Supporting cables nor any other type of fixing other than one of the two method 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 sub-contractor/M.C. shall work in close liaison With other services sub-contractors.

The Sub-Contractor/M.C shall include for the pro vision of fixing of approved type Colored slip on cable send markers to indicate permanently the correct phase and Neutral colors on all ends.

Provision 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 over which shall be provided and laid under the sub-contractor ./contract.

All necessary excavation and reinstatement of ground including sanding or trenches will be carried out by the sub-contractor /M.C, unless otherwise stated.

2.23 PVC INSULATED CABLES

Shall be of non-braided type as MCA reference 6491*600/1000/1000 volt grade cables, or equal approved.

PVC cables shall conform to the details of the “Cables and flexible cords ” and “cables Braid and insulation colors ”causes.

2.24 HEAT RESISTING CABLES

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

This type of cables shall be used in all instances where a temperature exceeding 100 degrees F but not exceeding 150 degrees F is likely to be experienced .Final connections to all lighting fittings (and other equipment where a temperature in excess of 150 degrees, likely to be experienced) shall be made using Silicon rubber insulated cable or equal and approved.

2.25 FLEXIBLE CORDS

Shall be in accordance with the “cable and flexible cord” clause. No cord shall be Less than 24/0.2mm in size unless otherwise specified.

Circular white twins TRS flex shall be used for plain pendant fittings up to 100 watts.

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 Cable “Clause 30).

2.26 CABLE ENDS AND PHASE COLOURS

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

2.27 CABLE INSULATION COLOURS

Unless otherwise stated in later clause the insulation colors shall be in accordance With the following table.

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

SYSTEM	INSULATION COLOUR	CABLE END MARKER
--------	-------------------	------------------

Main and sub-main

- | | | |
|-----------------|------------|-------|
| a) Phase..... | Red..... | Red |
| b) Neutral..... | Black..... | Black |

Sub-circuit single phase

- | | | |
|-----------------|------------|-------|
| a) Phase..... | Red..... | Red |
| b) Neutral..... | Black..... | Black |

2.28 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 20 points when protected by 10A MCB. Cables with different cross section area of copper shall not be used in combination.

Lighting circuits P.V.C cable 1.5mm² for all lighting circuits indicated on the drawing.

Power circuits P.V.C cable (minimum sizes).

- (i) 2.5mm² for one, two or three 5Amp sockets wired in parallel.
- (ii) 2.5mm² for one 15Amp socket.
- (iii) 2.5mm² for maximum often switched 13Amp sockets wired from 30 Amp 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 these specifications.

2.29 SPACE FACTOR

The maximum number of cables that may be accommodated in a 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 Regulation B.91, B.117 and B.118 of the I.E.E Regulations whichever is appropriate.

2.30 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.E regulations. Complete tests shall be made on all circuits by the Sub-contractor/M.C. before the installations are handed over.

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

2.31 LIGHTING SWITCHES

These shall be mounted flush with the walls, shall be contained in steel or alloys boxes and shall be of the gangs ratings and types shown in the drawings they shall be as manufactured by M.K Electrical Ltd or other equal and approved to KS 04-247: 1988

2.32 CONNECTORS

Shall be specified in the drawings and approved rating. These shall be fitted at all conduit box lighting point outlets for jointing of looped P.V.C. cables with flexible cables of specified quality.

2.33 TESTING ON SITE

The sub-contractor shall conduct during and at the completion of the installation and, if required, again at the expiration of the maintenance period, tests in accordance with the relevant section of the current edition of the Regulations for the electrical equipment of buildings issued by the I.E.E of Great Britain, the Government Electrical Specification and Electrical Supply Company's By-Laws.

- (a)** Tests shall be carried out to prove that all single pole switches are installed in the 'live' conductor.
- (b)** Tests shall be carried out to prove that all socket outlets and switched socket outlet are connected to the 'live' conductor in the terminal marked as such, and that each earth pin is effectively bonded to the earth continuity system. Tests shall be carried out to verify the continuity of all conductors of each 'ring' circuit.
- (c)** 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 result of the above tests shall be provided within 14 days of the witnessed tests and the sub-contractor will be required to issue to the service engineer the requisite certificate upon completion as required by the regulation referred to above.
- (d)** Any faults, defects or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation made apparent by such inspections or tests shall be rectified by the sub-contractor at his own expense.
- (e)** The sub-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 services engineer to enable him to carry out such tests as he may require.

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

The sub-contractor shall test to the service engineer's approval and as specified elsewhere in this specification or in standard and regulations already referred to, connecting to any power or other supply and setting to work.

Where such equipment, etc., forms part of or is connected to system whether primarily or of an electrical nature or otherwise (e.g. air conditioning system) the sub-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 to the service engineer's approval.

2.34 APPENDIX TO GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

The electrical sub-contractor shall comply with the following: -

- 1.** Government Electrical Specification No. 1 and No. 2.
- 2.** All requirements of Kenya Power and Lightning Company Limited, and Communications Commission of Kenya (CCK).

EVALUATION CRITERIA

TENDER EVALUATION CRITERIA

Evaluation will be done in five stages as follows: -

1. Determination of responsiveness.
2. Technical evaluation.
3. Financial evaluation.
4. Combination of technical and financial evaluation.
5. Recommendation for award.

1. STAGE 1. (TENDER RESPONSIVENESS)

- (i) In accordance with the requirement of the instruction to Tenderers under clause 5, only substantially responsive tenders will be subject to detailed evaluation. For purpose of clause 5, a responsive tender is one which conforms to all the terms, conditions and specifications of the tendering documents without material deviation or reservation. The mandatory conditions to be complied with are:

- a) Certified copy of registration/ incorporation.
- b) Certified Valid tax compliance certificate.
- c) Certified copy of registration with NCA 8 and above (Buildings)
- d) Copy of valid Certified National Construction Authority Certificate Category Eight (NCA 8) and above as Electrical contractor
- e) Form of tender dully filled, signed and stamped
- f) Submit a valid bid bond of Kshs **127,800** (One Hundred Twenty Seven Thousand Eight HUndred only) from a reputable bank or Insurance company. **BIDDERS MUST SUBMIT ORIGINAL HARD COPY TO PROCUREMENT OFFICE (ROOM 47) BEFORE THE TENDER CLOSES.**
- g) Litigation history (sworn and signed affidavit to be provided)
- h) Confidential business questionnaire (property filled and signed)
- i) Certified CR12 Form
- j) certified Valid single business permit from any county.
- k) Tender document **MUST** be serialized

(ii)Accompany shall fulfill all the above conditions in order to proceed to the technical evaluation.

(iii)Any company that does not fulfill any of the above conditions shall be disqualified from further evaluation at this stage.

2. STAGE 2. (TECHNICAL EVALUATION)

- (i) The technical analysis will be allocated 60 score.
- (ii) The tenderer **MUST** show proof of equipment, plant & machinery, Vehicle, similar works etc.
- (iii)The criteria for technical analysis will be as follows: -

Item	Criteria			Score	Max score
	Similar works Ongoing (at least 50% complete) Max.consideration, 3 projects	Below 2 million Kshs		1	

	Complete Project max.3 projects in the last 5 years	Over 2 m kshs		2	6
		Below 2 million kshs		2	
		Over 2m Kshs		3	9
					15
	Availability of equipment	Pickup	1 number More than 1	2 4	4
		Truck	1 number More than 1	3 5	5
		Other relevant	1 number	1	5
			2 number 3 and over	3 5	
					14
a)	Qualified personnel in relevant trade i.e. construction industry			Per person	
b)	2no.Key personnel but of different specialty with over 5 years' experience (Electrical, Qs's, Architects, Str/Civil Eng. & constr. managers	Diploma		1	3
				3	
		Diploma		1	2
		Degree		2	4
		Registered with relevant professional boards		2	4
4	Financial status KES-Audited	Financial statement of 2017 to 2019		1	1
				1	1

Item	criteria		score	Max score	
	Financial reports	<u>Financial statement of 2019</u>	1	1	
		<u>Net yearly operating profit</u>	Profit loss	1 0	1
		Non-current Asset base	0-15m Over15-30m Over 30m-40m Over 40m-50m Over 50	0 1 2 3 4	 4 8
5	Evidence of adequacy of working capital (cash at hand & Banks-signed & stamped current bank statement dated not more than a month from the date submission, letters of credit stating amount to be advanced)	<u>Has financial resources</u> below the cost of the project equal the cost of the project more than 2x the cost of the project	0 4 10	10 10	
Total score				60	

(iv). All companies that score 30 and above (out of 60) will proceed to financial evaluation.

STAGE 3. (FINANCIAL EVALUATION)

(I). MATERIAL DEVIATIONS, MARKET PRICES AND CONSISTENCY OF RATES

The bidder's prices shall be evaluated further by comparing them to the market prices financial evaluation shall be as follows: -

STAGE 4. RECOMMENDATION FOR AWARD

A recommendation will be made to award this tender to the tenderer with the lowest responsive bid at the price indicated on the form of tender.

3.0 MEASURED WORKS

PROPOSED 2NO. 30M HIGHMAST COMMUNITY LIGHTNING ARRESTOR UNIT COMPLETE WITH PILOT LAMP AT KAKAPEL AND KORISAI

ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	RATE (KSHS.)	AMOUNT (KSHS.)
	SUPPLY, INSTALL, TEST AND COMMISSION THE FOLLOWING COMMUNITY HIGHMAST LIGHTNING PROTECTION SYSTEM.				
1	Excavation of foundation raft 1.7MX1.7MX1.5M including grounding	9	CM		
2	Concrete Class 20 for lightning mast 1MX1MX1.5XM Deep plus allowance for mortising the 50mm diameter black pipes.	3	CM		
3	Y-16 reinforcement bars for base of foundation	400	KG		
	Y-10 reinforcement bars for base of foundation	150	KG		
4	Blinding 50mm thick in concrete 1:3:6	3.2	SM		
5	3M, 75mm diameter Black pipes complete with all necessary connections and one end mortised into concrete 1.1M deep	66	NO.		
6	50MM Diameter braces bolted at 1M intervals complete with diagonals welded to 75mm diameter pipe	180	NO.		
7	Accessories at 3M intervals e.g. bolts, nuts plus washers and plates.	180	NO.		
8	1000MMX1000MMX500MM deep RC stub columns for the prop tower leg anchorage.	6	NO.		
9	D-16X600MM long anchor bolts complete with nuts washers	24	NO.		
10	100MMX100MMX6MM anchor plates and all accessories	24	NO.		
11	Tower section painting –Apply Aviation paint to the 30M mast prop section only, confirming to recommended Kenya Civil Aviation Authority) KCAA standards and regulations.	100	SM		
12	Spline Ball Terminal (SBT) lightning arrestor complete with 2000mm by 15mm diameter copper Rod as furse P. NO. RA240.	2	NO.		
13	Downward conductor comprising of 25mmx 3mm thick copper tape connected to item No. 12 above C/W Copper square tape clamp for making cross tape joints as furse CT 105-FU	100	LM		
13	Earth inspection concrete chamber 300mmx300mmx300mm with an air tight inspection cover to approval.	2	NO.		

14	16mm nominal diameter by 1500mm threaded copper bond earth rod as furse P No 310 driven to the ground.	8	NO.		
14	Driving stud for the above item as furse ST 300.	8	NO.		
15	Earth electrode rod - to- downward conductor copper tape clamps as furse CR 105	8	NO.		
16	Supply and installation of Single Solar Aviation Light C/W inbuilt Solar Panel and Battery NiMH with 2years warranty complete with all accessories as TY10S.	2	ITEM		
17	Stainless straining wire 16MM SQ complete with hooks for supporting the Tower C/W all necessary accessories.	500	LM		
18	Testing, commissioning and certification	2	Item		

PROVISIONAL AND PRIME COSTS SUMS

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A.	Allow for Prime Cost Sum of Kenya shilling One hundred and Eighty thousand only for Project Management				180,000
	TOTAL CARRIED SUMMARY				180,000.00

3.1 GRAND SUMMARY

ITEM	DESCRIPTION	OFFICIAL USE		CONTRACTORS USE	
		KSHS	CTS	KSHS	CTS
A	ELETRICAL INSTALLATION				
B	PROVISIONAL AND PRIME COST SUMS	180,000	00		
	SUB-TOTAL				
	TOTAL CARRIED TO FORM OF TENDER				
C	ALL PRICES INCLUSSIVE OF 14% V.A.T.				
D	AMOUNT IN WORDS KENYA SHILLINGS.....				
E	CONTRACTOR'S NAME				
F	ADDRESS.....				
G	SIGNATURE & STAMP				
H	DATE.....				
I	WITNESS NAME.....				
J	ADDRESS.....				
K	SIGNATURE.....				
	DATE.....				

3.2 PRE-CONTRACT CONDITIONS:

**FOR SUCCESSFUL BIDDERS ENSURE THAT BEFORE YOU ARE HANDED OVER THE SITE: -
YOU MUST HAVE THE FOLLOWING IN YOUR CUSTODY.**

- 1. COPY OF THE WINNING BQ FROM YOUR CLIENT /EMPLOYER**
- 2. DRAWING FROM THE PROJECT MANAGER /ENGINEER**
- 3. LPO (LOCAL PURCHASE ORDER)**
- 4. ACCEPTANCE LETTER FROM YOUR CLIENT/EMPLOYER**
- 5. CONTRACT AGREEMENT TO BE SIGNED BY YOU AND THE EMPLOYER**
- 6. PERFORMANCE BOND IF IT IS A REQUIREMENT**
- 7. A WORK PROGRAMME APPROVED BY THE PROJECT MANAGER**

