

REPUBLIC OF KENYA



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

DEPARTMENT OF AGRICULTURE, LIVESTOCK, VETERINARY &
FISHERIES

OPEN TENDER DOCUMENT

FOR
PROPOSED ESTABLISHMENT OF TOMATO AGGREGATION CENTRE
AT TOGONYE MARKET CENTRE.

TENDER NO: CGK/ AL&F/ONT/002/2023-2024

County Government of Kirinyaga
P.O. Box 260-10304
KUTUS
Website: www.Kirinyaga.go.ke

SEPTEMBER, 2023

TABLE OF CONTENTS

INVITATION TO TENDER	3
PART 1 - TENDERING PROCEDURES	5
SECTION I: INSTRUCTIONS TO TENDERERS	6
A GENERAL PROVISIONS	6
B. CONTENTS OF TENDER DOCUMENTS	10
C. PREPARATION OF TENDERS	11
D.SUBMISSION AND OPENING OF TENDERS	17
SECTION II - TENDER DATA SHEET (TDS)	27
SECTION III - EVALUATION AND QUALIFICATION CRITERIA	30
MATERIALS AND WORKS	Error! Bookmark not defined.
GENERAL SPECIFICATIONS OF MATERIALS AND WORKS	Error! Bookmark not defined.
PART III - CONDITIONS OF CONTRACT AND CONTRACT FORMS	61
SECTION VIII - GENERAL CONDITIONS OF CONTRACT	62
SECTION IX - SPECIAL CONDITIONS OF CONTRACT	Error! Bookmark not defined.

INVITATION TO TENDER

PROCURING ENTITY: COUNTY GOVERNMENT OF KIRINYAGA

TENDER No: CGK/ AL&F/ONT/002/2023-2024

CONTRACT NAME AND DESCRIPTION: PROPOSED ESTABLISHMENT OF TOMATO AGGREGATION CENTRE AT TOGONYE MARKET CENTRE

1. The County Government of Kirinyaga invites sealed tenders for the **PROPOSED ESTABLISHMENT OF TOMATO AGGREGATION CENTRE AT TOGONYE MARKET CENTRE.**
2. Tendering will be conducted under open competitive method National using a standardized tender document. Tendering is open to all qualified and interested tenderers.
3. Qualified and interested tenderers may obtain further information and inspect the Tender Document at Supply Chain Office 1st floor, Kirinyaga County Headquarters during office between **8.00am** and **5.00pm** Kenyan Time, Monday to Friday except lunch time between **1.00 pm** to **2:00 pm** and on public holidays.
4. A complete set of tender documents may be obtained by interested tenders for free. Tender documents may be obtained electronically from the County Website www.Kirinyaga.go.ke or <https://tenders.go.ke>. Tender documents obtained electronically will be free of charge.
5. A complete set of tender documents may be obtained by interested tenders for free.
6. Tender documents may be viewed and downloaded for free from the website www.Kirinyaga.go.ke. Tenderers who download the tender document must forward their particulars immediately to procurement@kirinyaga.go.ke to facilitate any further clarification or addendum.
7. All Tenders must be accompanied by a tender Security of **Kshs.360,000/=** in any of the following forms; **a bank guarantee; a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority**
8. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain valid for **180** days from the date of opening of tenders.
9. The Tenderer shall chronologically and sequentially serialize all pages in a numerical format 1,2,3,4,5..... Including the cover page of the tender documents submitted
10. Completed tender document plus one copy should be enclosed in plain sealed envelopes marked with tender reference number and be deposited in the Tender Box located at 1 st Floor, County Government of Kirinyaga Headquarters, Kutus Town or be addressed and mailed to:

The County Secretary & Head of Public Service,

County Headquarters,

P.O Box 260 – 10304,

Kutus

so as to be received on or before, on or before **Wednesday 11th October ,2023 AT 10.00 AM**

11. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.
12. Late tenders will be rejected.
13. The addresses referred to above are.

Address for obtaining further information and for purchasing tender documents.

County Government of Kirinyaga
Physical address 1st Floor County Headquarters Kutus, County
P.O Box 260 – 10304 KUTUS
Director Supply Chain Services

Address for Submission of Tenders.

Name of Procuring Entity County Government of Kirinyaga
P.O Box 260 – 10304 KUTUS,
Physical address for the location (1st Floor Kirinyaga County Headquarters, Kutus)

Address for Opening of Tenders.

County Government of Kirinyaga
Physical address for the location (1st Floor Kirinyaga County Headquarters, Kutus)
P.O Box 260 – 10304 KUTUS,

**HEAD SUPPLY CHAIN MANAGEMENT.
FOR: COUNTY SECRETARY & HEAD OF PUBLIC SERVICE**

PART 1 - TENDERING PROCEDURES

SECTION I: INSTRUCTIONS TO TENDERERS

A GENERAL PROVISIONS

1. Scope of Tender

- 1.1 The Procuring Entity as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The name, identification, and number of lots (contracts) of this Tender Document are **specified in the TDS**.

2. Fraud and Corruption

- 2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 “Declaration not to engage in corruption”. The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.

- 2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the “Certificate of Independent Tender Determination” annexed to the Form of Tender.

- 2.3 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.

- 2.4 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the Firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender being tendered for. The Procuring Entity shall indicate in the **TDS** firms (if any) that provided consulting services for the contract being tendered for. The Procuring Entity shall check whether the owners or controllers of the Tenderer are same as those that provided consulting services. The Procuring Entity shall, upon request, make available to any tenderer information that would give such firm unfair competitive advantage over competing firms.

3. Eligible Tenderers

- 3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT

3.7 or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. Public employees and their close relatives (*spouses, children, brothers, sisters and uncles and aunts*) are not eligible to participate in the tender. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf

of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. The maximum number of JV members shall be specified in the **TDS**.

3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.

3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:

- a) Directly or indirectly controls, is controlled by or is under common control with another tenderer; or
- b) Receives or has received any direct or indirect subsidy from another tenderer; or
- c) Has the same legal representative as another tenderer; or
- d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process; or
- e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender; or
- f) any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as Engineer for the Contract implementation; or
- g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document or
- h) Has a close business or family relationship with a professional staff of the Procuring Entity who:
 - i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or
 - ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.

3.4 A tenderer shall not be involved in corrupt, coercive, obstructive, collusive or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified.

3.5 A Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative tenders. This includes participation as a subcontractor in other Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender.

3.6A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT 4.8.A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub- consultants for any part of the Contract including related Services.

3.7Tenderer that has been debarred from participating in public procurement shall be ineligible to tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.

3.8Tenderers that are state-owned enterprises or institutions may be eligible to compete and be awarded a Contract(s) only if they are accredited by PPRA to be (i) a legal public entity of the state Government and/or public administration, (ii) financially autonomous and not receiving any significant subsidies or budget support from any public entity or Government, and (iii) operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.

3.9A Firms and individuals may be ineligible if their countries of origin (a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country, or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or

any payments to any country, person, or entity in that country. A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

3.10Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, subcontracts and labor) from national suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity to determine if this condition is met shall be provided in for this purpose is be provided in *“SECTION III - EVALUATION AND QUALIFICATION CRITERIA, Item 9”*.

3.11 Pursuant to the eligibility requirements of ITT 4.10, a tender is considered a foreign tenderer if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has less than 51 percent ownership by Kenyan.

Citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.

3.12The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.

3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the website www.cak.go.ke

3.14 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

4. Eligible Goods, Equipment, and Services

4.1 Goods, equipment, and services to be supplied under the Contract may have their origin in any country that is not eligible under ITT 3.9. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of Goods, equipment, and services.

4.2 Any goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

5. Tenderer's Responsibilities

5.1 The tenderer shall bear all costs associated with the preparation and submission of his/her tender, and the Procuring Entity will in no case be responsible or liable for those costs.

5.2 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.

5.3 The Tenderer and any of its personnel or agents will be granted permission by the Procuring Entity to enter upon its premises and lands for the purpose of such visit. The Tenderer shall indemnify the Procuring Entity against all liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred as a result of the inspection.

5.4 The tenderer shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including charts, as necessary or required.

B. CONTENTS OF TENDER DOCUMENTS

6. Sections of Tender Document

6.1 The tender document consists of Parts 1, 2, and 3, which includes all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITT 8.

PART 1 Tendering Procedures

- i) Section I - Instructions to Tenderers (ITT)
- ii) Section II - Tender Data Sheet (TDS)
- iii) Section III - Evaluation and Qualification Criteria
- iv) Section IV - Tendering Forms

PART 2 Works Requirements

- i) Section V - Drawings
- ii) Section VI - Specifications
- iii) Section VII - Bills of Quantities

PART 3 Conditions of Contract and Contract Forms

- i) Section VIII - General Conditions of Contract (GCC)
- ii) Section IX - Special Conditions of Contract (SC)
- iii) Section X - Contract Forms

6.2 The Invitation to Tender Document (ITT) issued by the Procuring Entity is not part of the Contract documents.

6.3 Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 8. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

The Tenderer is expected to examine all instructions, forms, terms, and specifications in the Tender Document and to furnish with its Tender all information and documentation as is required by the Tender document.

7. Site Visit

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

8. Pre-Tender Meeting

8.1 The Procuring Entity shall specify in the **TDS** if a pre-tender meeting will be held, when and where. The Procuring Entity shall also specify in the **TDS** if a pre-arranged pretender site visit will be held and when. The Tenderer's designated representative is invited to attend a pre-arranged pretender visit of the site of the works. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

- 8.2 The Tenderer is requested to submit any questions in writing, to reach the Procuring Entity not later than the period specified in the **TDS** before the meeting.
- 8.3 Minutes of the pre-Tender meeting and the pre-arranged pretender site visit of the site of the works, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired the Tender Documents in accordance with ITT 6.3. Minutes shall not identify the source of the questions asked.
- 8.4 The Procuring Entity shall also promptly publish anonym ized (*no names*) Minutes of the pre-Tender meeting and the pre-arranged pretender visit of the site of the works at the web page identified in the **TDS**. Any modification to the Tender Documents that may become necessary as a result of the pre-tender meeting and the pre-arranged pretender site visit, shall be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to ITT 8 and not through the minutes of the pre-Tender meeting. Nonattendance at the pre-Tender meeting will not be a cause for disqualification of a Tenderer.

9. Clarification and amendments of Tender Documents

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

10. Amendment of Tendering Document

- 10.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tendering document by issuing addenda.
- 10.2 Any addendum issued shall be part of the tendering document and shall be communicated in writing to all who have obtained the tendering document from the Procuring Entity in accordance with ITT 6.3. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's web page in accordance with ITT 8.4.
- 10.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity shall extend, as necessary, the deadline for submission of Tenders, in accordance with ITT 25.2 below.

C. PREPARATION OF TENDERS

11. Cost of Tendering

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

conduct or outcome of the tendering process.

12. Language of Tender

12.1 The Tender, as well as all correspondence and documents relating to the tender exchanged by the tenderer and the Procuring Entity, shall be written in the English Language. Supporting documents and printed literature that are part of the Tender may be in another language provided they are accompanied by an accurate and notarized translation of the relevant passages into the English Language, in which case, for purposes of interpretation of the Tender, such translation shall govern.

13. Documents Comprising the Tender

13.1 The Tender shall comprise the following:

- a) Form of Tender prepared in accordance with ITT 14;
- b) Schedules including priced Bill of Quantities, completed in accordance with ITT 14 and ITT 16;
- c) Tender Security or Tender-Securing Declaration, in accordance with ITT 21.1;
- d) Alternative Tender, if permissible, in accordance with ITT 15;
- e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 22.3;
- f) Qualifications: documentary evidence in accordance with ITT 19 establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted;
- g) Conformity: a technical proposal in accordance with ITT 18;
- h) Any other document required in the **TDS**.

13.2 In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender,

together with a copy of the proposed Agreement. The Tenderer shall chronologically serialize pages of all tender documents submitted.

13.3 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.

14. Form of Tender and Schedules

14.1 The Form of Tender and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITT 20.3. All blank spaces shall be filled in with the information requested.

15. Alternative Tenders

15.1 Unless otherwise specified in the **TDS**, alternative Tenders shall not be considered.

15.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the **TDS**, and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.

15.3 Except as provided under ITT 13.4 below, Tenderers wishing to offer technical alternatives to the requirements of the Tender Documents must first price the Procuring Entity's design as described in the Tender Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the Winning Tender conforming to the basic technical requirements shall be considered by the Procuring Entity. When specified in the **TDS**, Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in the **TDS**, as will the method for their evaluating, and described in Section VII, Works' Requirements.

16. Tender Prices and Discounts

16.1 The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Bill of Quantities shall conform to the requirements specified below.

16.2 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Tenderer shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Procuring Entity. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.

16.3 The price to be quoted in the Form of Tender, in accordance with ITT 14.1, shall be the total price of the Tender, including any discounts offered.

16.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 14.1.

16.5 It will be specified in the **TDS** if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, except in cases where the contract is subject to fluctuations and adjustments, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.

16.6 Where tenders are being invited for individual lots (contracts) or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 16.4, provided the Tenders for all lots (contracts) are opened at the same time.

16.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

17. Currencies of Tender and Payment

17.1 Tenderers shall quote entirely in Kenya Shillings. The unit rates and the prices shall be quoted by the Tenderer in the Bill of Quantities, entirely in Kenya shillings. A Tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside Kenya shall device own ways of getting foreign currency to meet those expenditures.

18. Documents Comprising the Technical Proposal

18.1 The Tenderer shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Tender Forms, in sufficient detail to demonstrate the adequacy of the Tenderer's proposal to meet the work's requirements and the completion time.

19. Documents Establishing the Eligibility and Qualifications of the Tenderer

19.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.

19.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.

19.3 A margin of preference will not be allowed. Preference and reservations will be allowed, individually or in joint ventures. Applying for eligibility for Preference and reservations shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.

19.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.

19.5 The purpose of the information described in ITT 19.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.

19.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 6.3. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract

19.7 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.

19.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tendered pursuant to these requirements, then the tender will be rejected.

19.9 If information submitted by a tendered pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:

- i) if the procurement process is still ongoing, the tenderer will be disqualified from the procurement process,
- ii) if the contract has been awarded to that tenderer, the contract award will be set aside,
- iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.

19.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of- date, or attempts to obstruct the verification process, then the consequences ITT 6.7 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

20. Period of Validity of Tenders

20.1 Tenders shall remain valid for the Tender Validity period specified in the **TDS**. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 24). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.

20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 21.1, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 20.3.

20.3 If the award is delayed by a period exceeding the number of days to be specified in the **TDS** days beyond the expiry of the initial tender validity period, the Contract price shall be determined as follows:

- a) in the case of **fixed price** contracts, the Contract price shall be the tender price adjusted by the factor specified in the **TDS**;
- b) in the case of **adjustable price** contracts, no adjustment shall be made; or in any case, tender evaluation shall be based on the tender price without taking into consideration the applicable correction from those indicated above.

21. Tender Security

21.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the **TDS**, in original form and, in the case of a Tender Security, in the amount and currency specified in the **TDS**. A Tender-Securing Declaration shall use the form included in Section IV, Tender Forms.

21.2 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:

- a) an unconditional Bank Guarantee issued by reputable commercial bank); or
- b) an irrevocable letter of credit;
- c) a Banker's cheque issued by a reputable commercial bank; or
- d) another security specified in the **TDS**,

21.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 20.2.

21.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.

21.5 If a Tender Security is specified pursuant to ITT 21.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the **TDS**. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined nonresponsive or a bidder declines to extend tender validity period.

21.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the **TDS**.

21.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:

- e) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereto provided by the Tenderer; or
- f) if the successful Tenderer fails to:

- i) sign the Contract in accordance with ITT 50; or
- ii) furnish a Performance Security and if required in the **TDS**, and any other documents required in the **TDS**.

21.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.

21.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.

21.10 A tenderer shall not issue a tender security to guarantee itself.

22. Format and Signing of Tender

22.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 13 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 15, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number specified in the **TDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

22.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.

22.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the **TDS** and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.

22.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

22.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Tender.

D.SUBMISSION AND OPENING OF TENDERS

23. Sealing and Marking of Tenders

23.1 Depending on the sizes or quantities or weight of the tender documents, a tenderer may use an envelope, package or container. The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:

- a) in an envelope or package or container marked "ORIGINAL", all documents comprising

- the Tender, as described in ITT 11; and
- b) in an envelope or package or container marked “COPIES”, all required copies of the Tender; and
- c) if alternative Tenders are permitted in accordance with ITT 15, and if relevant:
 - i) in an envelope or package or container marked “ORIGINAL –ALTERNATIVE TENDER”, the alternative Tender; and
 - ii) in the envelope or package or container marked “COPIES- ALTERNATIVE TENDER”, all required copies of the alternative Tender.

The inner envelopes or packages or containers shall:

- a) bear the name and address of the Procuring Entity.
- b) bear the name and address of the Tenderer; and
- c) bear the name and Reference number of the Tender.

If an envelope or package or container is not sealed and marked as required, the *Procuring Entity* will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

24. Deadline for Submission of Tenders

24.1 Tenders must be received by the Procuring Entity at the address specified in the **TDS** and no later than the date and time also specified in the **TDS**. When so specified in the **TDS**, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the **TDS**.

24.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the Tender Documents in accordance with ITT 8, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

25. Late Tenders

25.1 The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of tenders, in accordance with ITT 24. Any Tender received by the Procuring Entity after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

26. Withdrawal, Substitution, and Modification of Tenders

26.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 22.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:

- a) prepared and submitted in accordance with ITT 22 and ITT 23 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” “MODIFICATION;” and
- b) received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 24.

26.2 Tenders requested to be withdrawn in accordance with ITT 26.1 shall be returned unopened to the Tenderers.

26.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the

Tenderer on the Form of Tender or any extension thereof.

27. Tender Opening

27.1 Except in the cases specified in ITT 23 and ITT 26.2, the Procuring Entity shall publicly open and read out all Tenders received by the deadline, at the date, time and place specified in the **TDS**, in the presence of Tenderers' designated representatives who chooses to attend. Any specific electronic Tender opening procedures required if electronic Tendering is permitted in accordance with ITT 24.1, shall be as specified in the **TDS**.

27.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelopes with the corresponding Tender shall not be opened but returned to the Tenderer. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.

27.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.

27.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.

27.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as the Procuring Entity may consider appropriate.

27.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bills of Quantities are to be initialed by the members of the tender opening committee attending the opening. The number of representatives of the Procuring Entity to sign shall be specified in the **TDS**.

27.7 At the Tender Opening, the Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 25.1).

27.8 The Procuring **Entity shall prepare minutes of the Tender Opening that shall include, as a minimum:**

- a) the name of the Tenderer and whether there is a withdrawal, substitution, or modification;
- b) the Tender Price, per lot (contract) if applicable, including any discounts;
- c) any alternative Tenders;
- d) the presence or absence of a Tender Security, if one was required.
- e) number of pages of each tender document submitted.

27.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of the tender opening register shall be distributed to all Tenderers upon request.

A. Evaluation and Comparison of Tenders

28. Confidentiality

28.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 46.

28.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.

28.3 Notwithstanding ITT 28.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact the Procuring Entity on any **matter related to the tendering process, it shall do so in writing.**

29. Clarification of Tenders

29.1 To assist in the examination, evaluation, and comparison of the tenders, and qualification of the tenderers, the Procuring Entity may, at its discretion, ask any tenderer for a clarification of its tender, given a reasonable time for a response. Any clarification submitted by a tenderer that is not in response to a request by the Procuring Entity shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the evaluation of the tenders, in accordance with ITT 33.

29.2 If a tenderer does not provide clarifications of its tender by the date and time set in the Procuring Entity's request for clarification, its Tender may be rejected.

30. Deviations, Reservations, and Omissions

30.1 During the evaluation of tenders, the following definitions apply:

- a) "Deviation" is a departure from the requirements specified in the tender document;
- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tender document; and
- c) "Omission" is the failure to submit part or all of the information or documentation required in the Tender document.

31. Determination of Responsiveness

31.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the tender itself, as defined in ITT 13.

31.2 A substantially responsive Tender is one that meets the requirements of the Tender document without material deviation, **reservation, or omission**. **A material deviation, reservation, or omission is one that, if accepted, would:**

- a) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
- b) limit in any substantial way, inconsistent with the tender document, the Procuring Entity's rights or the tenderer's obligations under the proposed contract; or
- c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.

31.3 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 18, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.

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

32. Non-material Non-conformities

32.1 Provided that a tender is substantially responsive, the Procuring Entity may waive any non-conformities in the tender.

32.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial non-conformities in the tender related to documentation requirements. Requesting information or documentation on such non- conformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.

32.3 Provided that a tender is substantially responsive, the Procuring Entity shall rectify quantifiable nonmaterial non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the **TDS**.

33. Arithmetical Errors

33.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in any way by any person or entity.

33.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle errors on the following basis:

- a) Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.
- b) Any errors in the submitted tender arising from a miscalculation of unit price, quantity, and subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and
- c) if there is a discrepancy between words and figures, the amount in words shall prevail

33.3 Tenderers shall be notified of any error detected in their bid during the notification of a ward.

34. Currency provisions

34.1 Tenders will be priced in Kenya Shillings only. Tenderers quoting in currencies other than in Kenya shillings will be determined non-responsive and rejected.

35. Margin of Preference and Reservations

35.1 No margin of preference shall be allowed on contracts for small works.

35.2 Where it is intended to reserve the contract to specific groups under Small and Medium Enterprises, or enterprise of women, youth and/or persons living with disability, who are appropriately registered as such by the authority to be specified in the **TDS**, a procuring entity shall ensure that the invitation to tender specifically indicates that only businesses/firms belonging to those specified groups are the only ones eligible to tender. Otherwise if no so stated, the invitation will be open to all tenderers.

36. Nominated Subcontractors

36.1 Unless otherwise stated in the **TDS**, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Procuring Entity.

36.2 Tenderers may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the **TDS**. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.

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

37. Evaluation of Tenders

37.1 The Procuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Procuring Entity shall determine the Best Evaluated Tender in accordance with ITT 40.

37.2 To evaluate a Tender, the Procuring Entity shall consider the following:

- a) price adjustment due to discounts offered in accordance with ITT 16;
- b) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 39;
- c) price adjustment due to quantifiable nonmaterial non-conformities in accordance with ITT 30.3; and
- d) any additional evaluation factors specified in the **TDS** and Section III, Evaluation and Qualification Criteria.

37.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in Tender evaluation.

37.4 In the case of multiple contracts or lots, Tenderers shall be allowed to tender for one or more lots and the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the **Form of Tender, is specified in Section III, Evaluation and Qualification Criteria.**

38. Comparison of Tenders

38.1 The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 38.2 to determine the Tender that has the lowest evaluated cost.

39. Abnormally Low Tenders

39.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.

39.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.

39.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

40. Abnormally High Tenders

40.1 An abnormally high price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that the Procuring Entity is concerned that it (the Procuring Entity) may not be getting value for money or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.

40.2 In case of an abnormally high tender price, the Procuring Entity shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. The Procuring Entity may also seek written clarification from the tenderer on the reason for the high tender price. The Procuring Entity shall proceed as follows:

- i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.
- ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.

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

41. Unbalanced and/or Front-Loaded Tenders

41.1 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or front loaded, the Procuring Entity may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the tender prices with the scope of works, proposed methodology, schedule and any other requirements of the Tender document.

41.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:

- a) accept the Tender; or
- b) require that the total amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding a 30% of the Contract Price; or
- c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works; or
- d) reject the Tender,

42. Qualifications of the Tenderer

42.1 The Procuring Entity shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

42.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 19. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.

42.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.

42.4 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price.

42.5 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.

42.6 After evaluation of the price analyses, if the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

43. Best Evaluated Tender

43.1 Having compared the evaluated prices of Tenders, the Procuring Entity shall determine the Best Evaluated Tender. The Best Evaluated Tender is the Tender of the Tenderer that meets the Qualification Criteria and whose Tender has been determined to be:

- a) Most responsive to the Tender document; and
- b) the lowest evaluated price.

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

44.1 The Procuring Entity reserves the right to accept or reject any Tender and to annul the Tender process and reject all Tenders at any time prior to Contract Award, without thereby incurring any liability to Tenderers. In case of annulment, all Tenderers shall be notified with reasons and all Tenders submitted and specifically, Tender securities, shall be promptly returned to the Tenderers.

B. AWARD OF CONTRACT

45. Award Criteria

45.1 The Procuring Entity shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender.

46. Notice of Intention to enter into a Contract

46.1 Upon award of the contract and Prior to the expiry of the Tender Validity Period the Procuring Entity shall issue a Notification of Intention to Enter into a Contract / Notification of award to all tenderers which shall contain, at a minimum, the following information:

- a) the name and address of the Tenderer submitting the successful tender;
- b) the Contract price of the successful tender;
- c) a statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in (c) above already reveals the reason;
- d) the expiry date of the Standstill Period; and
- e) instructions on how to request a debriefing and/or submit a complaint during the standstill period;

47. Standstill Period

47.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.

47.2 Where a Standstill Period applies, it shall commence when the Procuring Entity has transmitted to each Tenderer the Notification of Intention to Enter into a Contract with the successful Tenderer.

48. Debriefing by the Procuring Entity

48.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 46, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.

48.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending **such a debriefing meeting**.

49. Letter of Award

49.1 Prior to the expiry of the Tender Validity Period and upon expiry of the Standstill Period specified in ITT 42.1, upon addressing a complaint that has been filed within the Standstill Period, the Procuring Entity shall transmit the Letter of Award to the successful Tenderer. The letter of award shall request the successful tenderer to furnish the Performance Security within 21days of the date of the letter.

50. Publication of Procurement Contract

50.1 Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:

- a) name and address of the Procuring Entity;
- b) name and reference number of the contract being awarded, a summary of its scope and the selection method used;
- c) the name of the successful Tenderer, the final total contract price, the contract duration.
- d) dates of signature, commencement and completion of contract;
- e) names of all Tenderers that submitted Tenders, and their Tender prices as readout at Tender opening.

51. Procurement Related Complaints and Administrative Review

The procedures for making Procurement-related Complaints are as specified in the TDS. A request for administrative review shall be made in the form provided under contract forms

SECTION II - TENDER DATA SHEET (TDS)

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

ITT Reference	Particulars Of Appendix To Instructions To Tenders
A. General	
ITT 1.1	The name of the Tender is: <i>As per Invitation to Tender in this Tender Document</i> Procuring Entity is: <i>County Government of Kirinyaga</i> The reference number of the Tender is: <i>As per Invitation to Tender in this Tender Document</i> The number and identification of lots (contracts) comprising this Tender are: <i>N/A</i>
ITT 1.2(a)	Manual Submission- Applicable in this Tender
ITT 2.3	The Information made available on competing firms is as follows: <i>N/A</i> The firms that provided consulting services for the contract being tendered for are: <i>Not Applicable</i>
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: <i>Not Applicable</i>
ITT 3.7	A list of debarred firms and individuals is available on the PPRA's website: www.ppra.go.ke Tenderers shall be required to be registered with: <i>Not Applicable</i>
ITT 3.11	B. Contents of Tendering Document
ITT 6.1	For Clarification of Tender purposes, for obtaining further information for the tender document, the Procuring Entity's address is: (1) Name of Procuring Entity <i>County Government of Kirinyaga</i> (2) Physical address for hand Courier Delivery to an office or Tender Box Tender documents to be deposited in the Tender Box provided at the first floor Kutus Headquarters COUNTY OFFICES within Kutus Town (3) Postal Address <i>County Secretary, P. O. Box 260-10304, Kutus -</i> Insert name, telephone number and e-mail address of the officer to be contacted. <i>Director, SupplyChain Management, procurement@kirinyaga.go.ke</i>
C. Preparation of Tenders	
ITT 12.1	Alternative Tenders shall not be considered.
ITT 13.5	The prices quoted by the Tenderer shall not be subject to adjustment during the performance of the Contract.
ITT 13.8 (a) (iii)	Final Destination - County Government of Kirinyaga headquarters
ITT Reference	Particulars Of Appendix To Instructions To Tenders
ITT 13.8 (b) (ii)	The price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their destination which is <i>Not Applicable</i>
13.8 (c) (iv)	place of final destination is County Government of Kirinyaga headquarters
ITT 14.2	Foreign currency requirements not allowed.
ITT 15.4	Period the Goods are expected to be functioning: Immediately
ITT 16.2 (a)	Manufacturer's authorization is: Not Required
ITT 16.2 (b)	After sales service is: Not Required

ITT 17.1	The Tender validity period shall be (180) One hundred and eighty days.
ITT 17.3	<p>(a) The Number of days beyond the expiry of the initial tender validity period will be N/A.</p> <p>(b) The Tender price shall be adjusted by the following percentages of the tenderprice:</p> <p>(i) By _____ % of the local currency portion of the Contract price adjusted to reflect local inflation during the period of extension - Not Applicable</p> <p>(ii) By _____ % the foreign currency portion of the Contract price adjusted to reflect the international inflation during the period of extension - Not Applicable</p>
ITT 18.1	A Tender Security shall be required
ITT 19.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: The power attorney.
	D. Submission and Opening of Tenders
ITT 21.1	<p>Tenders shall submit tenders Manually: Tenderer MUST deposit completed tender documents in the Tender box located at 1st floor, County Government of Kirinyaga Headquarters, Kutus Town.</p> <p>The deadline for Tender submission is: Date: Wednesday 11th October ,2023 AT 10.00 AM Time: 10:00 A.m.</p> <p>Manual Tendering submission procedures shall apply</p>
ITT 24.1	The Tender opening shall take place at: 3 rd floor Conference room, Kirinyaga County Headquarters, Kutus
ITT Reference	Particulars Of Appendix to Instructions To Tenders
	Date: Wednesday 11th October ,2023 AT 10.00 AM Time: 10:00 A.m. The manual submission Tender opening procedures shall apply
	E. Evaluation and Comparison of Tenders
ITT 29.3	The manner of rectifying quantifiable nonmaterial nonconformities described below: Not Applicable
ITT 31.1	<p>The currency that shall be used for Tender evaluation and comparison purpose to convert at the selling exchange rate all Tender prices expressed in various currencies into a single currency is Kenya Shillings.</p> <p>The source of exchange rate shall be: N/A.</p> <p>The date for the exchange rate shall be: N/A</p>
ITT 32.3	<p>A margin of preference and/or reservation shall not apply.</p> <p>If a margin of preference applies, the application methodology shall be defined in Section III – Evaluation and Qualification Criteria Not Applicable</p>
ITT 32.5	The invitation to tender is extended to the following group that qualify for Reservations: N/A
ITT 33.2	Price evaluation will be done for: PROPOSED ESTABLISHMENT OF TOMATO AGGREGATION CENTRE AT TOGONYE MARKET CENTRE.
ITT 33.2 (d)	Additional evaluation factors are: Not Applicable.
ITT 33.6	<p>The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: [refer to Section III, Evaluation and Qualification Criteria; insert complementary details if necessary]</p> <ol style="list-style-type: none"> Deviation in Delivery schedule: N/A Deviation in payment schedule: N/A Life cycle costs: the costs during the life of the goods or equipment. N/A

	The performance and productivity of the equipment offered; N/A.
	F. Award of Contract
ITT 41.1	The maximum percentage by which quantities may be increased is: N/A The maximum percentage by which quantities may be decreased is: N/A
ITT 41.2	The procedures for making a Procurement-related Complaint are detailed in the “Notice of Intention to Award the Contract” herein and are also available from the PPRA website www.ppra.go.ke
ITT Reference	Particulars Of Appendix To Instructions To Tenders
	<p>If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to PPRA: For the attention:</p> <ol style="list-style-type: none"> 1) County Government of Kirinyaga 2) Physical address 1st Floor County Headquarters Kutus,County 3) P.O Box 260 – 10304 KUTUS 4) Director Supply Chain Services <p>In summary, a Procurement-related Complaint may challenge any of thefollowing:</p> <ol style="list-style-type: none"> 1. The terms of the Tendering Documents; and <p>Authority’s decision to award the contract.</p>

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1. General Provisions

Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the Kenya Shilling equivalent using the rate of exchange determined as follows:

- a) For construction turnover or financial data required for each year - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- b) Value of single contract - Exchange rate prevailing on the date of the contract signature.
- c) Exchange rates shall be taken from the publicly available source identified in the ITT 14.3. Any error in determining the exchange rates in the Tender may be corrected by the Procuring Entity.

This section contains the criteria that the Employer shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms. The Procuring Entity should use the Standard Tender Evaluation Document for Goods and Works for evaluating Tenders.

Evaluation and contract award Criteria

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

2. Preliminary examination for Determination of Responsiveness

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

PRELIMINARY EVALUATION CRITERIA

The following **mandatory requirements** shall be used for determination of Responsiveness at the preliminary evaluation.

STAGE 1: PRELIMINARY/ MANDATORY EVALUATION		
No.	Criteria	Yes/ No
MR1	Copy of Certificate of Incorporation/Business Name certified by commissioner of oaths.	
MR2	Certificate A copy of valid Tax Compliance Certificate certified by commissioner of Oaths (will be checked with KRA TCC.)	
MR3	Certified CR12 Certificate from the Registrar of Companies. This should be provided with Identification Documents of Directors and all individuals listed on the CR12. (ID or Passport). For Corporate Directors, CR12 or list equivalent for the corporate directors, Identification Documents for the corporate Director and its directors MUST be provided. (valid within 12 months of tender submission date)	
MR4	Copy of Registration with National Construction Authority (NCA) 7 and above as a Building Works contractor valid at the date of tender of submission;	
MR5	Copy of Valid Contractors Annual Practicing License from National Construction Authority (NCA) as a Building Works contractor;	
MR6	Valid certified Current Single Business permit (for the year 2023)	
MR7	Duly filled, signed and stamped Form of Tender	
MR8	Duly filled, signed and stamped Confidential Business Questionnaire.	
MR9	Tenderer shall provide a Tender Security. Shall be bank guarantee in the amount of Kshs Three hundred and Sixty Thousand (Kshs 360,000.00) in any of the following forms: bank guarantee; guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority.	
MR10	Submit a written power of attorney authorizing the signatory of the bid to commit the Bidder Witnessed by a Commissioner of Oaths	
MR11	Chronologically Serialize all the pages (this should be sequential in the format of 1, 2, 3, 4, 5.....) from the first page to the last page.	

N/B Only bidders who meet all of the above mandatory requirements will be subjected to technical evaluation.

3. **Tender Evaluation (ITT 35) Price evaluation:** in addition to the criteria listed in ITT 35.2 (a) –
- (c) the following criteria shall apply:
- i) **Alternative Completion Times**, if permitted under ITT 13.2, will be evaluated as follows:
.....N/A.....
 - ii) **Alternative Technical Solutions** for specified parts of the Works, if permitted under ITT 13.4, will be evaluated as follows:N/A.....
 - iii) **Other Criteria**; if permitted under ITT 35.2(d):
.....N/A.....

4. **Multiple Contracts**

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

OPTION 1

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

OPTION 2

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

5. **Alternative Tenders (ITT 13.1)**

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

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

6. **Margin of Preference** is not applicable

7. **Post qualification and Contract award (ITT 39), more specifically,**

- a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.
- b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.
 - i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent

of any contractual advance pay m e n t) sufficient to meet t h e construction cash flow of **Kenya Shillings Five Million (Kshs. 5,000,000)**

- ii) Minimum average annual construction turnover of **Kenya Shillings Thirty Million (Kshs. 30,000,000)**, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last **Three (3) years**.
- iii) At least **Three (3)** of contract(s) of a similar nature executed within Kenya, or the East African Community or abroad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value Kenya shillings Kenya Shillings Ten Million (Kshs.10,000,000), equivalent.

(iv.) Contractor's Representative and Key Personnel, which are specified as:

No	Position	Total Work Experience (years)	Experienc e In Similar Works(years)
1	Project Manager/Site Agent Degree in Engineering (Civil/Structural)	3	2
2	2 No Builders with diploma or degree in Building Construction	5	3

(v) Contractors key equipment listed on the table "Contractor's Equipment" below and more specifically listed as:

No.	Equipment Type and Characteristics	Minimum Number required
1.	Concrete Mixer Type 5/3.5	1
2.	Concrete vibrator poker type N.D. 50 mm	1
3.	Lorry	1
4.	Wielding Equipment	1
5.	Crane	1

(vi) Further Evaluation shall be conducted after Preliminary examination for Determination of Responsiveness. The said further evaluation shall comprise of the following:

- a. **Technical evaluation to determine compliance with mandatory technical specifications as provided in *Section VI*. Tenderers failing to comply with the mandatory technical specification shall not proceed to Detailed technical evaluation (scoring)**
- b. **Detailed technical evaluation (scoring)**
- c. **Financial evaluation.**

The Procuring Entity will make a determination on the best solution to choose between the two offers proposed. Consideration will be based on cost, sustainability, renewal of the prototype system proposed and the location of the flood masts.

(vii.) Tenders attaining the minimum score of 70 points in detailed technical evaluation shall be subjected to financial evaluation and comparison to determine the lowest evaluated price of the tender.

iv) Other conditions depending on their seriousness.

a) **History of non-performing contracts:**

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last (**Three years**). The required information shall be furnished in the appropriate form. **Contractors for similar works with the County Government exceeding the contract period will undergo further due diligence before they are recommended for award to ascertain their delivery within the stipulated timelines.**

a) **Pending Litigation**

Financial position and prospective long-term profitability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under Paragraph (i) above if all pending litigation will be resolved against the Tenderer. Tenderer shall provide information on pending litigations in the appropriate form.

b) **Litigation History**

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last (Three years). All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the years specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender.

DUE DILIGENCE

Pursuant to Section 83 of the Public Procurement and Assets Disposal Act, 2015 and the attendant regulations, due diligence shall be conducted on the lowest recommended bidder before award. The due diligence shall be conducted on the following basis inter alia:

(i) The bidder shall be assessed on the financial and the technical to carry out the project. In carrying out the due diligence the Contractor shall be requested to authorize or provide their current Bank statements to assess their financial capacity and capability.

(ii) The bidder if currently or previously engaged on other projects in the County Government shall be assessed on their current performance and delivery on those projects. Contractors with a poor performance record shall not be recommended for award.

(iii) The Bidder shall be required to further demonstrate that they can deliver on the project milestones within the stipulated timelines.

i) The County Government shall make its recommendations on the basis of multiple Contracts as stipulated under Clause 4 Multiple Contracts section III-Evaluation and Qualification Criteria.

Technical Examination

Award of points for the **Technical Evaluation** will be as follows: -

No	Parameter	Maximum Points
1.	Legal Capacity	5
2.	Audited Financial Report for the for the last 3 years	15
3.	Evidence of Financial Resources	10
4.	Key personnel	20
5.	General Experience	10
6.	Specific Construction Experience	15
7.	Detailed works program and methodology	10
8.	Schedules of contractor's equipment	15
Total		100

DETAILED TECHNICAL EXAMINATION

Item	Description	Max. Points	Points Scored
A)	Legal Capacity (Must Be Registered Company (Partnership, Sole Etc.))		
i.	Non-performance of a contract did not occur as a result of contractor default since 1 st February, 2023 <i>Fill information on non-completed works.</i>	2.5	
ii.	No consistent history of court/arbitral award decisions against the Tenderer since 1 st February, 2023. <i>Attach- Provide Current Sworn affidavit taken in the last 3 months from the tender opening date.</i>	2.5	
	Total point Scored	5	
B)	Financial Performance		
i.	Submission of Audited Financial reports for the last Three [3years].		
ii.	The current soundness of the applicant's financial position and its prospective long-term profitability – last three (3) (2020, 2021 & 2022 years audited reports Attach a copy of auditor practicing license. Audited accounts All pages must be initialed and stamped by both a practicing Auditor registered with ICPAK and one of the Directors. Auditor's practicing membership number from ICPAK must be indicated and a valid practicing license shall be provided or any documentary evidence showing renewal in process.	15	
iii.	Attach Copy of Line of credit	5	
iv.	Attach Copy of Bank statement (Last six months to the date of tender)	5	
	Total point Scored	25	
C.	Key Personnel as Detailed Under Clause 4 B (Iv) Of The Evaluation Criteria ND: Attach Curriculum Vitae And Certificates		
i.	Head Office staff: Project Manager/Site Agent for the firm Qualification =With relevant qualifications (Degree in Engineering (Civil/Structural) Specific Experience - 6 marks General Experience – 4 marks	10	
ii.	2 No. Builders with the relevant Qualifications (the overall in charge person(s) to be assigned for the site) with at least five years' experience in works of an equivalent nature and volume. Minimum National Diploma in Building Construction related field. HND – 10%; ND – 8% Qualification = Dip. in Civil Engineering Specific Experience – 6 marks General Experience – 4 marks	10	
	Total point Scored	20	

D	CONSTRUCTION EXPERIENCE		
	General Experience		
	Experience under named contract in the role of contractor, subcontractor, or management contractor for at least the last 2 years prior to the applications submission deadline. Provide list showing project name, contract period, contract sum, commencement date, completion date, and percentage currently.	10	
	Specific Construction Experience		
	Participation as contractor, management contractor or subcontractor, in at least three (3) public (government) contracts within the last two (2) years, each with a value of at least KShs. 15,00,000.00), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, Methods/technology or other characteristics as described in Scope of Works. Attach certified copies of completion certificates	15	
	Total point Scored	25	
E	WORK METHODOLOGY		
	Methodology/Detailed Workplan for implementing of works safety during the construction period and Proposed Equipment Scheduling/Work	5	
I.	Proposed Equipment Scheduling/Work statement.....1mrks	2.5	
II.	Methodology on safety during the construction period.....1mrks	2.5	
	Total point Scored	10	
F	Construction Equipment Capacity		
	Proof of essential Building works Construction equipment ownership or proposal for timely acquisition. Attach evidence of either (owned, leased, hired etc) including Models, photos, capacities, current working conditions, etc		
	Building works Plant & Equipment, Mixers/Graders/Crane/Excavators etc	10	
	Reliable Transport – Tipper/ Lorry. Pick up	5	
	Total point Scored	15	
	TOTAL POINTS	100	
	MINIMUM POINTS	70	

NB: Tenders attaining the minimum score of 70 points in detailed technical evaluation shall be subjected to financial evaluation and comparison to determine the lowest evaluated price of the tender. This shall be carried out in accordance to other criteria provided in the bid document.

3.0 Financial Evaluation Stage

- 1) This will include the following: -
 - a) Confirmation of and considering Bill of Quantities completed and signed.
 - b) Conducting a financial comparison
 - c) The lowest evaluated tender shall be awarded the tender.

3.1 Post Qualification

□ The lowest evaluated tender having passed stage 1 above shall be the winning bid subject to the employer's right to exercise due diligence relating to confirmation of information submitted by the bidder. **The CGK may conduct post-qualification as it deems necessary** in accordance with "The Public Procurement & Disposal Act 2015 Section 83 (1), which provides that *"An evaluation committee may, after tender evaluation, but prior to the award of the tender, conduct due diligence and present the report in writing to confirm and verify the qualifications of the tenderer who submitted the lowest evaluated responsive tender to be awarded the contract in accordance with this Act"*. Any bidder who shall be found to have supplied false or misleading information shall be disqualified and the next lowest tender that has passed stage 1 shall be considered.

□ To be eligible for award, in addition to the requirements given, the tenderer if previously contracted by CGK to offer similar services or any other contract, must not have had any negative evaluation for poor performance and/or delayed delivery of contract. In addition, any contract terminated on grounds of integrity and/or fraud or corruption is ineligible to tender. These bidders shall be disqualified and the next lowest tender that has passed stage 1 shall be considered.

□ ***In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award.***

□ History of non-performing contracts:

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last three (3) years. The required information shall be furnished in the appropriate form.

□ Pending Litigation

Financial position and prospective long-term profitability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under Paragraph (i) above if all pending litigation will be resolved against the Tenderer. Tenderer shall provide information on pending litigations in the appropriate form.

□ Litigation History

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last three (3) years. All parties to the contract shall furnish the information in the appropriate

8. MANUFACTURER'S FORMS

1. MANUFACTURER'S AUTHORIZATION FORM

*[The tenderer shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The tenderer shall include it in its Tender, if so indicated in the **TDS**.]*

Date *[insert date (as day, month and year) of Tender submission]*

ITT No.:.....*[insert number of ITT process]* Alternative

No. *[insert identification No if this is a Tender for an alternative]*

To *[Insert complete name of Procuring Entity]* WHEREAS

We..... *[insert complete name of Manufacturer]*, who are official manufacturers of.....*[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of tenderer]* to submit a Tender the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed..... *[Insert signature(s) of authorized representative(s) of the*

Manufacturer] Name.....*[Insert complete name(s) of authorized*

representative(s) of the Manufacturer] Title *[Insert title]*

Dated on__day of __, _____*[insert date of signing]*

2. MANUFACTURER'S WARRANTY FORM

{The tenderer shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.}

Date *[insert date (as day, month and year) of Tender submission]*

ITT No.:.....*[insert number of ITT process]* Alternative

No..... *[insert identification No if this is a Tender for an
alternative
]*

To *[Insert complete name of Procuring] Entity* WHEREAS

WE HEREBY WARRANT THAT:

- a) The goods to be supplied under the contract are new, unused, of the most recent or current specification and incorporate all recent improvements in design and materials unless provided otherwise in the Tender.
- b) The goods in the Tenderer's bid have no defect arising from manufacture, materials or workmanship or from any act or omission of the Tenderer that may develop under normal use of the goods under the conditions obtaining in Kenya.

The Warranty will remain valid for *[Insert no. years]* year after the goods, or any portion thereof as the case may be, have been delivered to the final destination indicated in the contract.

Signed..... *[Insert signature(s) of authorized representative(s) of the*

Manufacturer] Name..... *[Insert complete name(s) of authorized*

representative(s) of the Manufacturer] Title *[Insert title]*

Dated on __ day of __, _____ *[insert date of signing]*

3. **MANUFACTURER'S CONTACT DETAILS FORM**
(To Be Submitted on Manufacturer's Letterhead)

To:

County Government of Kirinyaga,
P.O BOX 260-10304
KUTUS

Manufacturer Details:

Company Legal Name

Company Trading Name

(Write the names in full)

Manufacturer Contacts:

Telephone No. _____

Postal Address _____

Email _____

Website _____

Physical Address _____

Main Contact:

Full Name _____

Email _____

Position _____

Telephone _____

Cellular _____

Describe your field of specialization

Signed (Authorized Signatory) _____

Name: _____

Stamp/Seal here

QUALIFICATION FORMS

1. TENDERER'S QUALIFICATION WITHOUT PRE-QUALIFICATION

To establish its qualifications to perform the contract in accordance with Section III, Evaluation and Qualification Criteria the Tenderer shall provide the information requested in the corresponding Information Sheets included hereunder.

1.1 FORM ELI -1.1

Tenderer Information Form

Date: _____

ITT No. and title: _____

Tenderer's name
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration: <i>[indicate country of Constitution]</i>
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITT 3.6 <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5 <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing: <ul style="list-style-type: none">• Legal and financial autonomy• Operation under commercial law• Establishing that the Tenderer is not under the supervision of the Procuring Entity
2. Included are the organizational chart and a list of Board of Directors.

OTHER FORMS

FORM OF TENDER

(Amended and issued pursuant to PPRA CIRCULAR No. 02/2022)

INSTRUCTIONS TO TENDERERS

- i) *All italicized text is to help the Tenderer in preparing this form.*
- ii) *The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address. Tenderers are reminded that this is a mandatory requirement.*
- iii) *Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION FORMS OF THE TENDERER as listed under (s) below.*

Date of this Tender submission:.....*[insert date (as day, month and year) of Tender submission]* **Tender Name** and **Identification**..... *[insert identification]* **Alternative No.:**.....*[insert identification No if this is a Tender for an alternative]*

To:..... *[Insert complete name of Procuring Entity]*

Dear Sirs,

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 and complete the Works and remedy any defects therein for the sum of Kenya Shillings *[Amount in figures]*

_____Kenya Shillings
*[amount in words]*_____.

The above amount includes foreign currency amount (s) of *[state figure or a percentage and currency]* *[figures]*_____ *[words]*_____.

The percentage or amount quoted above does not include provisional sums, and only allows not more than two foreign currencies.

2. 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 Special Conditions of Contract.
3. We agree to adhere by this tender until_____ *[Insert date]*, and it shall remain binding upon us and may be accepted at anytime before that date.
4. 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 further understand that you are not bound to accept the lowest or any tender you may receive.

5. We, the undersigned, further declare that:
- i) No reservations: We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 28;
 - ii) Eligibility: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;
 - iii) Tender-Securing Declaration: We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing or Proposal-Securing Declaration in the Procuring Entity's Country in accordance with ITT 19.8;
 - iv) Conformity: We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: *[insert a brief description of the Works]*;
 - v) Tender Price: The total price of our Tender, excluding any discounts offered in item 1 above is:
[Insert one of the options below as appropriate]
 - vi) Option 1, in case of one lot: Total price is: *[insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies]*; Or

Option 2, in case of multiple lots:
 - a) Total price of each lot *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*; and
 - b) Total price of all lots (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;
 - vii) Discounts: The discounts offered and the methodology for their application are:
 - viii) The discounts offered are: *[Specify in detail each discount offered.]*
 - ix) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;
 - x) Tender Validity Period: Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
 - xi) Performance Security: If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;
 - xii) One Tender Per Tender: We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT 3.4, other than alternative Tenders submitted in accordance with ITT 13.3;
 - xiii) Suspension and Debarment: We, along with any of our subcontractors, suppliers, Project Manager, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.
 - xiv) State-owned enterprise or institution: *[select the appropriate option and delete the other]*
[We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITT 3.8];

xv) Commissions, gratuities, fees: We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender processor execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].*

Name of Recipient	Address	Reason	Amount

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

- xvi) Binding Contract: We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- xvii) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive;
- xviii) Fraud and Corruption: We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;
- xix) Collusive practices: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the “Certificate of Independent Tender Determination” attached below.
- xx) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from____(*specify website*) during the procurement process and the execution of any resulting contract.
- xxi) **Beneficial Ownership Information:** We commit to provide to the procuring entity the Beneficial Ownership Information in conformity with the Beneficial Ownership Disclosure Form upon receipt of notification of intention to enter into a contract in the event we are the successful tenderer in this subject procurement proceeding.
- xxii) We, the Tenderer, have duly completed, signed and stamped the following Forms as part of our Tender:
- Tenderer's Eligibility; Confidential Business Questionnaire – to establish we are not in any conflict to interest.
 - Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.
 - Self-Declaration of the Tenderer – to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
 - Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal

Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in “**Appendix 1- Fraud and Corruption**” attached to the Form of Tender.

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

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

Title of the person signing the Tender: [insert complete title of the person signing the Tender]

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

Date signed _____ day of _____, _____

Notes

* In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer

** Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender.

A. TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

Tender is instructed to complete the particulars required in this Form, *one form for each entity if Tender is a JV.*

Tenderer is further reminded that it is an offence to give false information on this Form.

(a) **Tenderer's details**

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

General and Specific Details

b) **Sole Proprietor**, provide the following details.

Name in full _____ Age _____ Nationality _____
_____ Country of Origin _____ Citizenship _____

c) **Partnership**, provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

d) **Registered Company**, provide the following details.

i) Private or public Company_____

ii) State the nominal and issued capital of the Company_____

Nominal Kenya Shillings (Equivalent).....

Issued Kenya Shillings (Equivalent).....

iii) Give details of Directors as follows.

	Names of Director	Nationality	Citizenship	% Shares owned
1				
2				
3				

(e) **DISCLOSURE OF INTEREST- Interest of the Firm in the Procuring Entity.**

i) Are there any person/persons in..... (*Name of Procuring Entity*) who has/have an interest or relationship in this firm?

Yes/No..... If yes, provide details as follows.

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

ii) **Conflict of interest disclosure**

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another Tenderer		

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

f) Certification

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

Full Name _____ Title or

Designation _____

(Signature)

(Date)

B. CERTIFICATE OF INDEPENDENT DETERMINATION

I, the undersigned, in submitting the accompanying Letter of Tender to the _____ [Name of Procuring Entity] for: _____ [Name and number of tender] in response to the request for tenders made by: _____ [Name of Tenderer] do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of _____ [Name of Tenderer] that:

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

Name _____ Title _____ Date _____

[Name, title and signature of authorized agent of Tenderer and Date].

SELF - DECLARATION FORMS

FORM SD1

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

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

1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of *(insert name of the Company)* who is a Bidder in respect of Tender No. for *(insert tender title/description)* for *(insert name of the Procuring entity)* and duly authorized and competent to make this statement.
2. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.
3. THAT what is deposed to herein above is true to the best of my knowledge, information and belief.

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

Bidder Official Stamp

FORM SD2

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

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

1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of.....
(*insert name of the Company*) who is a Bidder in respect of Tender No.
.....for
..... (*insert tender title/description*) for..... (*insert name of the Procuring entity*) and duly authorized and competent to make this statement.
2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of (*insert name of the Procuring entity*) which is the procuring entity.
3. THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of (name of the procuring entity)
4. THAT the aforesaid Bidder will not engage /has not engaged in any corrosive practice with other bidders participating in the subject tender
5. THAT what is deponed to herein above is true to the best of my knowledge information and belief.

.....
.....

) (Date)

(Title)
(Signature)

Bidder's Official Stamp

DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I (person) on behalf of (*Name of the Business/ Company/Firm*) declare that I have read and fully understood the contents of the Public Procurement & Asset Disposal Act, 2015, Regulations and the Code of Ethics for persons participating in Public Procurement and Asset Disposal and my responsibilities under the Code.

I do hereby commit to abide by the provisions of the Code of Ethics for persons participating in Public Procurement and Asset Disposal.

Name of Authorized signatory.....
Sign.....

Position.....
.....

Office

address.....

Telephone E-

mail.....

.....

Name of the
Firm/Company.....
...

Date (Company Seal/

Rubber Stamp where applicable)

Witness

Name Sign.....

Date.....

APPENDIX 1- FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

1. Purpose

2. The Government of Kenya's Anti-Corruption and Economic Crime laws and their sanction's policies and procedures, Public Procurement and Asset Disposal Act (*no. 33 of 2015*) and its Regulation, and any other Kenya's Acts or Regulations related to Fraud and Corruption, and similar offences, shall apply with respect to Public Procurement Processes and Contracts that are governed by the laws of Kenya.

3. Requirements

The Government of Kenya requires that all parties including Procuring Entities, Tenderers, (applicants/proposers), Consultants, Contractors and Suppliers; any Sub-contractors, Sub-consultants, Service providers or Suppliers; any Agents (whether declared or not); and any of their Personnel, involved and engaged in procurement under Kenya's Laws and Regulation, observe the highest standard of ethics during the procurement process, selection and contract execution of all contracts, and refrain from Fraud and Corruption and fully comply with Kenya's laws and Regulations as per paragraphs 1.1 above.

Kenya's public procurement and asset disposal act (*no. 33 of 2015*) under Section 66 describes rules to be followed and actions to be taken in dealing with Corrupt, Coercive, Obstructive, Collusive or Fraudulent practices, and Conflicts of Interest in procurement including consequences for offences committed. A few of the provisions noted below highlight Kenya's policy of no tolerance for such practices and behavior: -

- 1) a person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding;
- 2) A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence;
- 3) Without limiting the generality of the subsection (1) and (2), the person shall be: -
 - a) disqualified from entering into a contract for a procurement or asset disposal proceeding; or
 - b) if a contract has already been entered into with the person, the contract shall be voidable;
- 4) The voiding of a contract by the procuring entity under subsection (7) does not limit any legal remedy the procuring entity may have;
- 5) An employee or agent of the procuring entity or a member of the Board or committee of the procuring entity who has a conflict of interest with respect to a procurement: -
 - a) shall not take part in the procurement proceedings;
 - b) shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and
- c) shall not be a subcontractor for the bidder to whom was awarded contract, or a member of the group of bidders to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.
- 6) An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to the procuring entity;

- 7) If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5)(a) and the contract is awarded to the person or his relative or to another person in whom one of them had a direct or indirect pecuniary interest, the contract shall be terminated and all costs incurred by the public entity shall be made good by the awarding officer. Etc.

In compliance with Kenya's laws, regulations and policies mentioned above, the Procuring Entity:

- a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:
- i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v) "obstructive practice" is:
 - deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.
- b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:
- "fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of the procuring entity or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive the procuring entity of the benefits of free and open competition.
- c) Rejects a proposal for award¹ of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority (ies) for sanctioning and debarment of a firm

or individual, as applicable under the Acts and Regulations;

- e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub-consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect² all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and
- f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a “Self-Declaration Form” as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

¹*For the avoidance of doubt, a party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and tendering, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.*

²*Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Investigating Authority or persons appointed by the Procuring Entity to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.*

FORM OF TENDER SECURITY-[Option 1–Demand Bank Guarantee]

Beneficiary: _____

Request for Tenders No: _____

Date: _____

TENDER GUARANTEE No.: _____

Guarantor: _____

1. We have been informed that _____ (here inafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (here inafter called" the Tender") for the execution of _____ under Request for Tenders No. ("the ITT").
2. Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee.
3. At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:
 - (a) has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Applicant; or
 - b) having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or
(ii) has failed to furnish the Performance.
4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.
5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

TENDER GUARANTEE No.: _____

1. Whereas [*Name of the tenderer*] (hereinafter called “the tenderer”) has submitted its tender dated [*Date of submission of tender*] for the [*Name and/or description of the tender*] (hereinafter called “the Tender”) for the execution of _____ under Request for Tenders No. _____ (“the ITT”).
2. KNOW ALL PEOPLE by these presents that WE of [**Name of Insurance Company**] having our registered office at (hereinafter called “the Guarantor”), are bound unto [*Name of Procuring Entity*] (hereinafter called “the Procuring Entity”) in the sum of (Currency and guarantee amount) for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

Sealed with the Common Seal of the said Guarantor this _____ day of _____ 20 ____.
3. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Applicant:
 - a) has withdrawn its Tender during the period of Tender validity set forth in the Principal's Letter of Tender (“the Tender Validity Period”), or any extension thereto provided by the Principal; or
 - b) having been notified of the acceptance of its Tender by the Procuring Entity during the Tender Validity Period or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to tenderers (“ITT”) of the Procuring Entity's Tendering document. Then the guarantee undertakes to immediately pay to the Procuring Entity up to the above amount upon receipt of the Procuring Entity's first written demand, without the Procuring Entity having to substantiate its demand, provided that in its demand the Procuring Entity shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.
4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or
(b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) twenty-eight days after the end of the Tender Validity Period.
5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[Date]

[Signature of the Guarantor]

[Witness]

[Seal]

TENDER-SECURING DECLARATION FORM

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

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

Tender No..... *[insert number of tendering process]*

To:..... *[insert complete name of Purchaser]* I/We, the undersigned, declare that:

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

Signed: Capacity / title

(director or partner or sole proprietor, etc.) Name:

... Duly authorized to sign

the bid for and on behalf of: *[insert complete name of Tenderer]*

Dated on day of *[Insert date of signing]* Seal or stamp

FORM OF WRITTEN POWER-OF-ATTORNEY

The Bidder shall state here below the name(s) and address of his representative(s) who is/are authorized to commit the bidder and receive on his behalf correspondence in connection with the Bid. The Tender document shall be signed by the Person(s) with the Power of Attorney.

.....
(Name of Bidder's Representative in block letters)

.....
(Address of Bidder's Representative)

.....
(Signature of Bidder's Representative)

Alternate.....

.....
(Name of Bidder's Representative in block letters)

.....
(Address of Bidder's Representative)

.....
(Signature of Bidder's Representative)

- *To be filled by all Bidders.
- *Both representative and alternate must attach copy of National Identification card or Passport.
- *Where the representative is not a Director of the Firm, At least one Director must sign below.

	Name of Director	Signature	Date
1.
2.
3.
4.

PART III - CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VIII - GENERAL CONDITIONS OF CONTRACT

These General Conditions of Contract (GCC), read in conjunction with the Special Conditions of Contract (SCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

General Conditions of Contract

A. General

1. Definitions

1.1 Bold face type is used to identify defined terms.

- a) **The Accepted Contract Amount** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- b) **The Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
- c) **The Adjudicator** is the person appointed jointly by the Procuring Entity and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
- d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
- e) **Compensation Events** are those defined in GCC Clause 42 hereunder.
- f) **The Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
- g) **The Contract** is the Contract between the Procuring Entity and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
- h) **The Contractor** is the party whose Bid to carry out the Works has been accepted by the Procuring Entity.
- i) **The Contractor's Bid** is the completed bidding document submitted by the Contractor to the Procuring Entity.
- j) **The Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
- k) **Days** are calendar days; months are calendar months.
- l) **Day works** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- m) **A Defect** is any part of the Works not completed in accordance with the Contract.
- n) **The Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.

- o) **The Defects Liability Period** is the period **named in the SCC** pursuant to Sub-Clause 34.1 and calculated from the Completion Date.
- p) **Drawings** means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Entity in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- q) **The Procuring Entity** is the party who employs the Contractor to carry out the Works, **as specified in the SCC**, who is also the Procuring Entity.
- r) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- s) **“In writing” or “written”** means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- t) The Initial Contract Price is the Contract Price listed in the Procuring Entity's Letter of Acceptance.
- u) **The Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- v) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- w) **Plant** is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- x) **The Project Manager** is the person **named in the SCC** (or any other competent person appointed by the Procuring Entity 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.
- y) **SCC** means Special Conditions of Contract.
- z) **The Site** is the area of the works **as defined as such in the SCC**.
- aa) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- bb) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- cc) **The Start Date** is **given in the SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- dd) **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.
- ee) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- ff) **A Variation** is an instruction given by the Project Manager which varies the Works.
- gg) **The Works** are what the Contract requires the Contractor to construct, install, and turn over to the Procuring Entity, **as defined in the SCC**.

2. Interpretation

2.1 In interpreting these GCC, words indicating one gender include all genders. Words

indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.

2.2 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order of priority:

- a) Agreement,
- b) Letter of Acceptance,
- c) Contractor's Bid,
- d) Special Conditions of Contract,
- e) General Conditions of Contract, including Appendices,
- f) Specifications,
- g) Drawings,
- h) Bill of Quantities⁶, and
- i) any other document **listed in the SCC** as forming part of the Contract.

⁶*In lump sum contracts, delete “Bill of Quantities” and replace with “Activity Schedule.”*

3. Language and Law

3.1 The language of the Contract is English Language and the law governing the Contract are the Laws of Kenya.

3.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Procuring Entity's Country when

- a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country; or
- b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

4. Project Manager's Decisions

4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the Procuring Entity and the Contractor in the role representing the Procuring Entity.

5. Delegation

5.1 Otherwise **specified in the SCC**, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.

6. Communications

- 6.1 Communications between parties that are referred to in the Conditions 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 Procuring Entity 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, and the Procuring Entity between the dates given in the Schedule of Other Contractors, as **referred to in the SCC**. The Contractor shall also provide facilities and services for them as described in the Schedule. The Procuring Entity may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

9. Personnel and Equipment

- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 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.
- 9.3 If the Procuring Entity, Project Manager or Contractor determines, that any employee of the Contractor be determined to have engaged in Fraud and Corruption during the execution of the Works, then that employee shall be removed in accordance with Clause 9.2 above.

10. Procuring Entity's and Contractor's Risks

- 10.1 The Procuring Entity carries the risks which this Contract states are Procuring Entity's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Procuring Entity's Risks

- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Procuring Entity'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 Procuring Entity 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 Procuring Entity or in the Procuring Entity's design, or due to war or radioactive contamination directly affecting the country where the

11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is a Procuring Entity's risk except loss or damage due to

- aa) a Defect which existed on the Completion Date,
- bb) an event occurring before the Completion Date, which was not itself a Procuring Entity's risk, or
- cc) the activities of the Contractor on the Site after the Completion Date.

12. Contractor's Risks

12.1 From the Starting Date until the Defects Liability 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 Procuring Entity's risks are Contractor's risks.

13. Insurance

13.1 The Contractor shall provide, in the joint names of the Procuring Entity and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the SCC** for the following events which are due to the Contractor's risks:

- 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.

13.2 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 to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

13.3 If the Contractor does not provide any of the policies and certificates required, the Procuring Entity may effect the insurance which the Contractor should have provided and recover the premiums the Procuring Entity has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.

13.5 Both parties shall comply with any conditions of the insurance policies.

14. Site Data

14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the SCC**, supplemented by any information available to the Contractor.

15. Contractor to Construct the Works

15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.

16. The Works to Be Completed by the Intended Completion Date

16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works 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.

17. Approval by the Project Manager

17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.

17.2 The Contractor shall be responsible for design of Temporary Works.

17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

18. Safety

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

19. Discoveries

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

20. Possession of the Site

20.1 The Procuring Entity 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 SCC**, the Procuring Entity shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

21. Access to the Site

21.1 The Contractor shall allow the Project Manager and any person authorized 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.

22. Instructions, Inspections and Audits

22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.

22.2 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and sub-consultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.

22.3 The Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Procuring Entity and/or persons appointed by the Public Procurement Regulatory Authority to inspect the Site and/or the accounts and records relating to

the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Public Procurement Regulatory Authority. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Public Procurement Regulatory Authority's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Public Procurement Regulatory Authority's prevailing sanctions procedures).

23. Appointment of the Adjudicator

23.1 The Adjudicator shall be appointed jointly by the Procuring Entity and the Contractor, at the time of the Procuring Entity's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Procuring Entity does not agree on the appointment of the Adjudicator, the Procuring Entity will request the Appointing Authority designated in the SCC, to appoint the Adjudicator within 14 days of receipt of such request.

23.2 Should the Adjudicator resign or die, or should the Procuring Entity and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Procuring Entity and the Contractor. In case of disagreement between the Procuring Entity and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the SCC at the request of either party, within 14 days of receipt of such request.

24. Settlement of Claims and Disputes

24.1 Contractor's Claims

24.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.

24.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Procuring Entity shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

24.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

24.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Procuring Entity's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

24.1.5 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- a) this fully detailed claim shall be considered as interim;
- b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
- c) the Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.

24.1.6 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.

24.1.7 Within the above defined period of 42 days, the Project Manager shall proceed in accordance with Sub-Clause

24.1.8 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

24.1.9 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

24.1.10 If the Project Manager does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Project Manager and any of the Parties may refer to Arbitration in accordance with Sub-Clause 24.4 [Arbitration].

24.1.11 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause 24.3.

24.2 Amicable Settlement

24.2.1 Where a notice of a claim has been given, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, the Party giving a notice of a claim in accordance with Sub-Clause 24.1 above should move to commence arbitration after the fifty-sixth day from the day on which a notice of a claim was given, even if no attempt at an

24.3 Matters that may be referred to arbitration

24.3.1 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:

- a) The appointment of a replacement Project Manager upon the said person ceasing to act.
- b) Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
- c) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
- e) Any dispute arising in respect of war risks or war damage.
- f) 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 Procuring Entity and the Contractor agree otherwise in writing.

24.4 Arbitration

- 24.4.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 24.3 shall be finally settled by arbitration.
- 24.4.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute 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.
- 24.4.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 24.4.4 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.
- 24.4.5 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.
- 24.4.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
- 24.4.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.
- 24.4.8 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Project Manager shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 24.4.9 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

24.5 Arbitration with National Contractors

- 24.5.1 If the Contract is with national contractors; arbitration proceedings will be conducted in accordance with the Arbitration Laws of Kenya. In case of any claim or dispute,

such claim or 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, on the request of the applying party, 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

24.5.2 The institution written to first by the aggrieved party shall take precedence over all other institutions.

24.6 Alternative Arbitration Proceedings

24.6.1 Alternatively, the Parties may refer the matter to the Nairobi Centre for International Arbitration (NCIA) which offers a neutral venue for the conduct of national and international arbitration with commitment to providing institutional support to the arbitral process.

24.7 Failure to Comply with Arbitrator's Decision

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

24.7.2 In the event that a Party fails to comply with a final and binding Arbitrator's decision, then the other Party may, without prejudice to any other rights it may have, refer the matter to a competent court of law.

24.8 Contract operations to continue

24.8.1 Notwithstanding any reference to arbitration herein,

- a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- b) the Procuring Entity shall pay the Contractor any monies due the Contractor.

25. Fraud and Corruption

25.1 The Government requires compliance with the country's Anti-Corruption laws and its prevailing sanctions policies and procedures as set forth in the Constitution of Kenya and its Statutes.

25.2 The Procuring Entity requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

B. Control

26. Program

26.1 Within the time stated in the SCC, after the date of the Letter of Acceptance, 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. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.

26.2 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.

26.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the SCC 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. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.

26.4 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.

27. Extension of the Intended Completion Date

27.1 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.

27.2 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 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 by this failure shall not be considered in assessing the new Intended Completion Date.

28. Acceleration

28.1 When the Procuring Entity wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the contractor. If the Procuring Entity accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Procuring Entity and the Contractor.

28.2 If the Contractor's priced proposals for an acceleration are accepted by the Procuring Entity, they are incorporated in the Contract Price and treated as a Variation.

29. Delays Ordered by the Project Manager

29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

30. Management Meetings

30.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

30.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Procuring Entity. 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.

31. Early Warning

31.1 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.

31.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for 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 instruction of the Project Manager.

C. Liability Control

32. Identifying Defects

32.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking 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.

33. Tests

33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

34. Correction of Defects

34.1 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 SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

34.2 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.

35. Uncorrected Defects

35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

D. Cost Control

36. Contract Price⁷

36.1 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

37. Changes in the Contract Price⁸

37.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Procuring Entity.

37.2 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

38. Variations

38.1 All Variations shall be included in updated Programs⁹ produced by the Contractor.

38.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer

period stated by the Project Manager and before the Variation is ordered.

38.3 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.

38.4 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.

⁷In lump sum contracts, replace GCC Sub-Clauses 36.1 as follows:

36.1 The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

⁸In lump sum contracts, replace entire GCC Clause 37 with new GCC Sub-Clause 37.1, as follows: The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

⁹In lumpsum contracts, add "and Activity Schedules" after "Programs."

¹⁰In lumpsum contracts, delete this paragraph.

38.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning

38.6 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 39.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill 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 Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work

38.7 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;

- a) the proposed change(s), and a description of the difference to the existing contract requirements;
- b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Procuring Entity may incur in implementing the value engineering proposal; and
- c) a description of any effect(s) of the change on performance/functionality.

38.8 The Procuring Entity may accept the value engineering proposal if the proposal demonstrates benefits that:

- a) accelerate the contract completion period; or
- b) reduce the Contract Price or the life cycle costs to the Procuring Entity; or
- c) improve the quality, efficiency, safety or sustainability of the Facilities; or
- d) yield any other benefits to the Procuring Entity, without compromising the functionality of the Works.

38.9 If the value engineering proposal is approved by the Procuring Entity and results in:

- a) a reduction of the Contract Price; the amount to be paid to the Contractor shall be the **percentage specified in the SCC** of the reduction in the Contract Price; or
- b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in

(a) to(d) above, the amount to be paid to the Contractor shall be the full increase in the Contract Price.

39. Cash Flow Forecasts

39.1 When the Program¹¹, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

40. Payment Certificates

40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.

40.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.

40.3 The value of work executed shall be determined by the Project Manager.

40.4 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed¹².

40.5 The value of work executed shall include the valuation of Variations and Compensation Events.

40.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

40.7 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (which would be the tender price), payment valuation certificates and variation orders on omissions and additions valued based on rates in the

Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: $(\text{corrected tender price} - \text{tender price}) / \text{tender price} \times 100$.

41. Payments

41.1 Payments shall be adjusted for deductions for advance payments and retention. The Procuring Entity shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Procuring Entity makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.

41.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or 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.

41.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.

41.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Procuring Entity and shall be deemed covered by other rates and prices in the Contract.

42. Compensation Events

42.1 The following shall be Compensation Events:

- d) The Procuring Entity does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
- e) The Procuring Entity modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- f) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- g) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- h) The Project Manager unreasonably does not approve a subcontract to be let.
- i) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from visual inspection of the Site.
- j) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Procuring Entity, or additional work required for safety or other reasons.
- k) Other contractors, public authorities, utilities, or the Procuring Entity does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- l) The advance payment is delayed.
- m) The effects on the Contractor of any of the Procuring Entity's Risks.
- n) The Project Manager unreasonably delays issuing a Certificate of Completion.

42.2 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.

42.3 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 shall assume that the Contractor shall react competently and promptly to the event.

¹¹In lump sum contracts, add “or Activity Schedule” after “Program.”

¹²In lump sum contracts, replace this paragraph with the following: “The value of work executed shall comprise the value of completed activities in the Activity Schedule.”

42.4 The Contractor shall not be entitled to compensation to the extent that the Procuring Entity's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

43. Tax

43.1 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 bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of

tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.

44. Currency of Payment

44.1 All payments under the contract shall be made in Kenya Shillings

45. Price Adjustment

45.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC**. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies:

$$P = A + B \frac{I_m}{I_o}$$

where:

P is the adjustment factor for the portion of the Contract Price payable.

A and B are coefficients¹³ **specified in the SCC**, representing the non-adjustable and adjustable portions, respectively, of the Contract Price payable and I_m is the index prevailing at the end of the month being invoiced and I_o is the index prevailing 30 days before Bid opening for inputs payable.

45.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

46. Retention

46.1 The Procuring Entity shall retain from each payment due to the Contractor the proportion stated in the **SCC** until Completion of the whole of the Works.

46.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 53.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an “on demand” Bank guarantee.

47. Liquidated Damages

47.1 The Contractor shall pay liquidated damages to the Procuring Entity at the rate per day stated in the **SCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the **SCC**. The Procuring Entity may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

47.2 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 rates specified in GCC Sub-Clause 41.1.

48. Bonus

48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the SCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

49. Advance Payment

49.1 The Procuring Entity shall make advance payment to the Contractor of the amounts stated in the **SCC** by the date stated in the **SCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Procuring Entity in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.

49.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.

49.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

50. Securities

50.1 The Performance Security shall be provided to the Procuring Entity no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the SCC**, by a bank or surety acceptable to the Procuring Entity, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 day from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.

51. Day works

51.1 If applicable, the Day works rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

51.2 All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.

51.3 The Contractor shall be paid for Day works subject to obtaining signed Day works forms.

52. Cost of Repairs

52.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

53. Completion

53.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.

54. Taking Over

54.1 The Procuring Entity shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

55. Final Account

55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 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 sum of the two coefficients A and B should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the non-adjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other non-adjustable components. The sum of the adjustments for each currency are added to the Contract Price.

56. Operating and Maintenance Manuals

56.1 If “as built” Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.

56.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC Sub-Clause 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the SCC** from payments due to the Contractor.

57. Termination

57.1 The Procuring Entity or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

57.2 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 Procuring Entity or the Contractor is made 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 Procuring Entity to the Contractor within 84 days of the date of the Project Manager's certificate;
- 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;
 - g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the SCC**; or
 - h) if the Contractor, in the judgment of the Procuring Entity has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Procuring Entity may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.

57.3 Notwithstanding the above, the Procuring Entity may terminate the Contract for convenience.

57.4 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.

57.5 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 GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.

58. Payment upon Termination

58.1 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 less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as specified in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the Procuring Entity exceeds any payment due to the Contractor, the difference shall be a debt payable to the Procuring Entity.

58.2 If the Contract is terminated for the Procuring Entity's convenience or because of a fundamental breach of Contract by the Procuring Entity, 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, and less advance payments received up to the date of the certificate.

59. Property

59.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Procuring Entity if the Contract is terminated because of the Contractor's default.

60. Release from Performance

60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Procuring Entity 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 and for any work carried out afterwards to which a commitment was made.

SECTION IX - SPECIAL CONDITIONS OF CONTRACT

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
A. General	
GCC 1.1 (q)	County Government of Kirinyaga Physical address 1st Floor County Headquarters Kutus, County P.O Box 260 – 10304 KUTUS
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be <i>As per work program</i>
GCC 1.1 (x)	The Project Manager is. The Director Public Works & Housing County Government of Kirinyaga P. O. Box 260-10304 KUTUS
GCC 1.1 (cc)	The Start Date shall be immediately after site handing over
GCC 1.1 (gg)	The Works consist of TENDER FOR THE PROPOSED ESTABLISHMENT OF TOMATO AGGREGATION CENTRE AT TOGONYE MARKET CENTRE
GCC 2.2	Sectional Completions are: <i>Allowed</i>
GCC 5.1	The Project manager <i>may</i> delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: <i>None</i>
GCC 9.1	<p>Key Personnel</p> <p>GCC 9.1 is replaced with the following:</p> <p>9.1 Key Personnel are the Contractor's personnel named in this GCC 9.1 of the Special Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.</p> <p>[insert the name/s of each Key Personnel agreed by the Procuring Entity prior to Contract signature.]</p>

GCC 13.1	<p>The minimum insurance amounts and deductibles shall be:</p> <p>(a) for loss or damage to the Works, Plant and Materials: <i>[insert amounts]</i>.</p> <p>(b) For loss or damage to Equipment: <i>[insert amounts]</i>.</p> <p>(c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract <i>[insert amounts]</i>.</p> <p>(d) for personal injury or death:</p> <p>(i) of the Contractor's employees: <i>[amount]</i>.</p> <p>(ii) of other people: <i>[amount]</i>.</p>
GCC 14.1	Site Data are: To be determined
GCC 20.1	The Site Possession Date(s) shall be: <i>As communicated by the Project Manager.</i>
Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 23.1 & GCC 23.2	<p>Appointing Authority for the Adjudicator:</p> <p>Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: to be determined guided by fees guidelines</p>
B. Time Control	
GCC 26.1	The Contractor shall submit for approval a Program for the Works within <i>[number]</i> days from the date of the Letter of Acceptance.
GCC 26.3	<p>The period between Program updates is Fourteen (14) days.</p> <p>The amount to be withheld for late submission of an updated Program is <i>[insert amount]</i>.</p>
C. Quality Control	
GCC 34.1	The Defects Liability Period is: 180 days.
D. Cost Control	
GCC 38.9	If the value engineering proposal is approved by the Procuring Entity the amount to be paid to the Contractor shall be: Not applicable
GCC 44.1	The currency of the Procuring Entity's Country is: <i>Kenya Shillings</i>
GCC 45.1	<p>The Contract <i>is not</i> subject to price adjustment in accordance with GCC Clause 45, and the following information regarding coefficients <i>does not</i> apply.</p> <p>The coefficients for adjustment of prices are:</p> <p>(a) percent nonadjustable element (coefficient A).</p> <p>(b) percent adjustable element (coefficient B).</p> <p>(c) The Index I for shall be.</p>
GCC 46.1	The proportion of payments retained is: <i>10% of amount payable.</i>

GCC 47.1	The liquidated damages for the whole of the Works are <i>at the rate of 0.05% per day.</i>
GCC 49.1	The Advance Payments shall be: None and shall be paid to the Contractor no later than <i>Not applicable</i>
GCC 50.1	The Performance Security amount is <i>10% of the Contract Amount.</i> (a) Performance Security – Bank Guarantee: in the amount(s) of <i>10% percent</i> of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.
E. Finishing the Contract	
GCC 56.1	The date by which operating, and maintenance manuals are required is: Not Applicable The date by which “as built” drawings are required is : Not Applicable
Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 56.2	The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required in GCC 58.1 is : <i>Not Applicable</i>
GCC 57.2 (g)	The maximum number of days is: <i>180 days.</i>
GCC 58.1	The percentage to apply to the value of the work not completed, representing the Procuring Entity’s additional cost for completing the Works. as per the applicable law

SPECIFICATIONS

Notes for preparing Specifications

- 1.0 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.

Specifications from previous similar projects are useful and may not be necessary to re-write specifications for every Works Contract.

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.

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.

- 2.0 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.

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

PART A: SPECIFICATIONS AND PRICING NOTES FOR BUILDER'S WORKS

The Contractor should read carefully the following specification for workmanship prepared in accordance with standard specifications for building works 1976 Edition prepared by the Ministry of Roads, Public Works and Housing.

A.0 GENERAL ITEMS

A.1 MATERIALS GENERALLY

All materials used on the works shall be new and of the qualities and kinds specified herein and equal to approved samples. Deliveries shall be made sufficiently in advance to enable samples to be taken and tested if required. No materials shall be used until approved and all materials which are not approved or which are damaged, contaminated or have deteriorated in any way or do not comply in any way with the requirements of this specification shall be rejected and shall be immediately removed from the site at the contractors expense.

A.2 MATERIAL FOR WHICH THERE IS A KENYA BUREAU OF STANDARD SPECIFICATION

All materials used in the works for which a Kenya Bureau of Standards (K.S.) specification has been published shall conform to the latest edition hereof in every way. The Architect reserves the right to demand that the Contractor shall obtain at his own expense a certificate in respect of any materials to state that is in accordance with the Kenya Bureau of Standard specifications.

A.3 MATERIALS FOR WHICH THERE IS NO KENYA BUREAU OF STANDARDS SPECIFICATION

All materials used in the works for which no Kenya Bureau of Standards specification has been published shall conform to the British Standards (B.S.) specification for such materials. If there are no published standards as specified for any materials, the quality of such materials shall be generally of a standard equal to those for which there is a Kenya Bureau of Standards or British Standard Specification.

B.0 EXCAVATION AND EARTHWORK

B.1 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 cutting remaining materials to a tip provided by the Contractor.

B.2 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, turf, soft rock, boulders or whatever other subsoil is encountered except hard rock as defined below.

B.3 FOUNDATION EXCAVATIONS

The foundation trenches and column bases shall be excavated to 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 measurement 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 drawing or as instructed by the Engineer, then he shall at his own expense fill 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 or the cost of back filling such excavation or disposing of surplus.

B.4 SURPLUS SOIL DISPOSAL

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

B.5 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.

B.6 FILLING UNDER SURFACE BEDS IN BUILDINGS

i) MURRAM FILLING

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 10 ton smooth wheeled roller or a 2 ton vibrating roller until all movement ceases and 100% California Bearing Ratio (C.B.R.) is obtained.

ii) 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.

B.7 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 the 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.

B.8 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 back 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.

B.9 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 there upon 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.

B.10 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.

C.0 CONCRETE WORK

C.1 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 B.S. 8110 parts 1&2, B.S. 8004, B.S. 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.

C.2 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.

C.3 CEMENT

Cement unless otherwise specified shall be Ordinary Portland cement or a brand and source approved by the Engineer and shall comply with the requirements of K.S.02-21. A manufacturer's certificate of test in accordance with K.S.02.21 shall be supplied for each consignment delivered to the Site.

C.4 AGGREGATE

Aggregates shall conform to 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 requirement but is dirty or altered in any manner it shall be screened and/or washed in clean water at the Contractor's 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 premixed cores aggregates be brought to the patching plant. On no account shall aggregates be stock-piled on the ground.

C.5 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.

C.6 QUALITY CONTROL AT WORKS STAGE

Once the concrete mix is accepted form preliminary to works stage, the principal basis of control shall be analysis of the cube test results at 28 days.

C.7 CEMENT

The quantity of cement shall be measured by weight. Where delivered in bags, 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 metres of coarse aggregate per 50kg bag of cement	0.12	0.16
Cubic metres of coarse aggregate per 50kg bag of cement	0.24	0.32
Maximum size of coarse aggregate 40mm x 40mm or 20mm for blinding concrete where described.		

Where batching is by volume, approved gauge boxes as 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.

C.8 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 maximum shear, viz, vertical at, or near midspans of slabs, ribs and deems.

C.9 FAULTY CONCRETE

Any concrete which fails to comply with these preambles, or which shows signs of setting before it is placed shall be taken out and removed from the batch; where concrete is found to be defective after it has set the concrete shall be cut out and replaced in accordance with the Engineer's instruction. On no account shall any

faulty, honeycombed, or otherwise defective concrete be repaired or patched until the Engineer has made an inspection and issued instructions for the repair.

C.10 STEEL REINFORCEMENT

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

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

C.11 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.

C.12 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 detailed or directed by the Engineer.

C.13 FORMWORK

The method and system of formwork which the Contractor proposes 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 materials.

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.

D. WALLING

D.0 MATERIALS

D.1 CEMENT

Cement used for making mortar shall be as described in concrete work.

D.2 LIME

The lime for making mortar shall be obtained from an approved source and shall comply with B.S. 890 Class A for non-hydraulic lime. The lime can be run to putty in an approved lined pit or container. The water to be first run into the pit or container and the lime to be added until it is completely submerged, stirred vigorously until all lumps are disintegrated and shall be kept constantly covered with water and regularly stirred for at least four

weeks. The resulting milk–lime then to be run through a fine sieve and run into a pit or other container and kept clean and moist for not less than two weeks before being used in the works.

D.3 SAND

Sand used for making mortar shall be clean, well graded siliceous sand of good sharp hard quality equal to samples which shall be deposited with and approved by the Architect. It shall be free from lumps of stone, earth, loam, dust, salt, organic matter and other deleterious substances, passed through a fine sieve and washed with clean water if so directed by the Architect.

D.4 WATER

Shall be as described in Concrete work.

D.5 STONE

All stones shall comply with the requirement of CP 121.202 for masonry and rubble walls respectively except where amended or extended by the following clauses.

D.6 REINFORCED WALLS

Steel reinforcing bars in walls shall be carefully placed and spacers used to ensure that a minimum of 20mm cover is given to the reinforcement unless otherwise specified.

Horizontal reinforcement in mortar joints shall be laid such that the reinforcement is not in contact with the blocks or stone.

D.7 WALL TIES

Wall ties shall be provided to connect walls to steel or concrete columns and beams to connect two unbound leaves of wall.

Wall ties shall be provided at 450mm centres both vertically and 900mm centres horizontally and shall be staggered when used to connect two leaves of unbound wall. Wall ties shall be embedded into each material by a minimum of 50mm

D.8 FAIR FACE

All concrete and hollow blockwork described as finished with a fair face is to be built to a true and even face with the joints finished as specified hereinafter.

D.9 POINTING

Pointing of walls shall be prepared for pointing by raking out all loose or friable material to a minimum of 15mm to form a square recess. The joints shall then be wetted and new mortar shall be forced into the joints and finished as directed.

E. GLAZING

E.0 MATERIALS

E.1 GENERAL

Glass used in glazing and for mirrors shall be best quality clear glass free from visible defects so that to afford uninterrupted vision or reflection as appropriate and without obvious distortion.

E.2 STANDARDS

Glass for glazing and mirrors shall be approved manufacture and is to comply with B.S. 952 in all respects free from flaws, bubbles, specks and other imperfections. E.3. CLEAR SHEET GLASS ETC.

The clear sheet glass shall be ordinary glazing (OG) quality.

F. METALWORK

F.0 MATERIALS

F.1 GENERALLY

All materials shall be the best of their respective kinds free from defects and all work is to be carried out in the most workmanlike manner and strictly as directed by an 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.

F.2 MILD STEEL

Mild steel shall comply with B.S. 15.

F.3 HOLLOW SECTION TUBING

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

F.4 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.

F.5 GALVANIZED SHEET STEEL

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

F.7 STEEL GRILLES

Steel grilles shall be manufactured from section conforming to B.S.990 of heavy duty sections of the metric W20 range of approved manufacture 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.

WORKMANSHIP

F.8 WELDING

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

F.9 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 Architect's satisfaction.

F.10 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.

G. FLOOR, WALL AND CEILING FINISHING

G.0 PLASTERWORK

G.1 GENERALLY

Render, both internal and external shall be cement and sand in the proportions 1:4 finished to the thickness specified.

Plaster shall consist of an undercoat of 1 part cement to 6 parts sand by volume, and a finishing coat of 1 part cement to 10 parts lime putty. Each coat shall be finished to the thickness specified.

G.2 CEMENT

Ordinary Portland Cement and shall comply with K.S. 02-21. White and coloured cements shall comply with B.S. 12 and be obtained from an approved manufacturer.

G.3 LIME

Lime shall be prepared from hydrated lime complying with B.S. 890, Part 2. G.4

SANDS

Sands for cement and lime mixes shall comply with B.S. 1199, Table 1.

G.5 WATER

Water shall be clean and kept free from all impurities.

G.6 MIXING OF MATERIALS

All materials shall be thoroughly mixed in the proportions described. No mixes of plasters, other than described shall be used.

G.7 PERIOD BETWEEN COATS

Cement – lime undercoats shall be allowed to dry out thoroughly before a further coat is applied.

G.8 SURFACES OF BEDS AND BACKINGS

Screeded beds for in-situ finishings of floor finishings bedded in mortar shall be left rough from the screeding board. Floated beds for inflexible floor finishing bedded in mastic, shall be left with a plain untextured surface. Trowelled beds for flexible finishings shall be finished smooth and free from score marks, grooves or depressions. Screeded backings for in-situ wall finishings or wall finishings bedded in mortar shall be scratched for key. Floated backings for inflexible wall finishings shall be finished smooth and free from score marks or depressions. Beds and backings for finishings by specialists shall be to the approval of the specialist.

G.9 PREPARATION OF SURFACES

All surfaces to receive the finishing in this section shall be thoroughly cleaned. Screeds to receive finishing bedded in mortar shall be well wetted before laying is commenced.

H. PAINTING AND DECORATING

H.0 MATERIALS

H.1 COLOUR RANGE

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

H.2 APPROVAL OF BRANDS

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

H.3 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 event 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.

H.5 SAME 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 makers' undercoat).

H.8 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.

H.15 BLACK BITUMINOUS PAINT

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

H.20 PRIMER FOR IRON AND STEELWORK

Primer for iron and steelwork shall be:-

- i) Lead based priming paint complying with B.S. 2523, Type B.
- ii) Calcium plumbate priming paint complying with B.S. 3698, Type A.

H.25 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.

H.26 OIL PAINTS

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

H.27 POLYURETHANE LACQUER

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

H.31 PLASTER, RENDERING, CONCRETE BLOCK WORK 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.

H.35 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.

H.37 HARDWOOD

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

H.38 FIBREBOARD

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

H.39 PLYWOOD

Surfaces of plywood to be filled as required with a plaster based filler for internal work, and a filler as described in stopping here before for external work, and then rubbed down and all dust and loose materials brushed off.

H.40 WOODWORK TO BE PAINTED

Before fixing woodwork, all surfaces which will be visible after fixing shall be rubbed down and all knots and resin pockets shall be scorched back and coated with knotting.

After priming and fixing, all nail holes and other imperfections shall be stopped and whole surface shall be rubbed down and all dust brushed off.

H.41 WOODWORK TO RECEIVE CLEAR FINISH

All holes and other imperfections in surfaces to receive a clear finish shall be stopped and the whole surface shall be rubbed down to a fine satin finish and all dust brushed off.

WORKMANSHIP

H.42 STANDARD OF WORKMANSHIP

Prior to the commencement of internal or external decoration, (areas not exceeding 50sq.m. in total area), and designated by the Architect, shall be completely decorated, and after approval shall be used as a standard for the whole of the works. Any additional cost involved in carrying out such decoration in advance of the general work shall be deemed to be included in the contract sum. Such decorated surfaces shall be made good and touched up as necessary prior to the handing over of the works.

H.43 STIRRING OF MATERIALS

The contents of all cans and containers of all materials must be properly and thoroughly stirred before and during use and shall be suitably strained as and when necessary.

H.44 MANUFACTURER'S INSTRUCTIONS

All materials shall be used strictly in accordance with instructions issued by the manufacturers concerned. The addition of thinners, driers or other materials will only be permitted when specially required by the maker and the procedure approved by the Architect.

H.45 BRUSH WORK

Unless otherwise described, all coatings shall be applied by brush. Written permission must be obtained from the Architect for the application of coatings by spray or roller where not as described, and if permission is granted, such application shall not result in extra cost to the Employer.

DRAWINGS

- Note 1. The tender drawings including Site plans should be annexed in a separate booklet and issued to bidders during the Pre Tender Site meeting.

PART B: GENERAL SPECIFICATIONS OF MATERIALS AND WORKS FOR ELECTRICAL 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 Regulations 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 Earthing
- 2.16 Cables and Flexible Cords
- 2.17 Armoured PVC Insulated and Sheathed Cables
- 2.18 Cable Supports; Markers and Tiles
- 2.19 PVC Insulated Cables
- 2.20 Heat Resisting Cables
- 2.21 Flexible Cords

- 2.22 Cable Ends and phase Colours
- 2.23 Cable Insulation Colours
- 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 Lampholders
- 2.33 Lamps
- 2.34 lighting Fittings Street lighting Lanterns
- 2.35 Position of Points and Switches
- 2.36 Street/Security Lighting Columns
- 2.37 Timing Control Switch
- 2.38 Wiring System for Street Lighting
- 2.39 Metal control Pillar
- 2.40 Current Operated Earth leakage circuit breaker
- 2.41 MV Switchboard
- 2.42 Steel Conduits and Steel Trunking
- 2.43 Testing on Site

2.1 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 may be 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.

2.2 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 section.

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

Three sets of diagrams and drawings shall be provided, all to the approval of the Engineer.

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

2.3 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.

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.

2.4 POSITIONS OF ELECTRICAL PLANT AND APPARATUS

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

2.5 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 moulded plastic with the tripping mechanism and arc chambers separated and sealed from the cable terminals.

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

The tripping mechanism shall be on inverse characteristic to prevent tripping in temporary overloads and shall not be affected by normal 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: Ivorine labels shall be secured to the insulation barriers in such a manner as to indicate the number of the circuits shown on the circuit chart.

Insulated barriers shall be fitted between phases, and neutrals in all boards, and to shroud live parts.

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

FUSED SWITCHGEAR AND ISOLATORS

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

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

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

Isolators shall be load breaking/fault making isolators.

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

2.6 CONDUITS AND CONDUIT RUNS

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

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

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

The Sub-contractors 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 conduits 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 complete in every respect.

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

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

Runs between draw in boxes are not to have more than two right angle bends or their equivalent . The sub-contractor may be required to demonstrate to the Engineers that wiring in any particular run is easily withdrawable and the sub-contractor may, at no extra cost to the contract; be required to install additional draw-in boxes required. If conduit is installed in straight runs in excess of 6000mm, expansion couplings as manufactured by Egatube shall be used at intervals of 6000mm.

Where conduit runs are to be concealed in pillars and beams, the approval of the Structural Engineer, shall be obtained. The sub-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 and chases. Should the sub-contractor fail to inform the main contractor of any inaccuracies in this respect they shall be rectified at the sub-contractors expense.

It will be the Sub-contractors responsibility to ascertain from site, the 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 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 the Engineer. The sub-contractor alone shall be responsible for the accuracy of the final position.

2.13 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 KS 04 – 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 conduits of 32mm outside diameter and larger. For drawing in of cables in exposed runs of conduit, standard pattern through boxes are to be used:

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

Outlet boxes for lighting fittings are to be of the loop-in type where conduit installation is concealed and the 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 enamelled or galvanised 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 2 BA brass roundhead screws; No adaptable box shall be less than 75mm x 75mm x 50mm or larger than 300mm x 300mm x 75mm and shall be adequate in depth in relation to the size of conduit entering it. Conduits shall only enter boxes by means of conduit bushes.

2.14 LABELS

Labels fitted to switches and fuseboards;-

- (i) Shall be Ivorine 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 panels
 - a) Reference number
 - b) Type of board, i.e., lighting, sockets, etc.,
 - c) Size of cable supplying panel
 - d) where to isolate feeder cable
- (v) Shall be generally not less than 75mm x 50mm.

2.15 EARTHING

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

- (i) It shall be carried out in accordance with the appropriate sections of the current edition of the Regulations, for the Electrical Equipment of Buildings issued by Institute of Electrical Engineers of Great Britain.
- (ii) At all main distribution panels and main service positions a 25mm x 3mm minimum cross sectional area Copper tape shall be provided and all equipment including the lead sheath and armouring of cables, distribution boards and metal frames shall be bonded thereto.
- (iii) The earth tape in Sub-clause (ii) shall be connected by 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., it shall be served with corrosion resisting tape or coated with corrosion compound and braided
- (v) Where the earth electrode is located outside the building a removable test link shall be provided inside the building as near as possible to the point of entry to the tape, for isolating the earth electrode for testing purposes.
- (vi) Earthing of sub-main equipment shall be deemed to be satisfactory where the sub-main cables are M.I.C.S. or conduit with separate earth wire, and installation is carried out in accordance with the figures stated in the current edition of the I.E.E Regulations.
- (vii) Where an earth rod is specified (see Sub-clause (iii)) it shall be proprietary manufacture, solid hand drawn copper of 15mm diameter driven into the ground to a minimum depth of 3.6m . It shall be made up to 1.2m sections with internal screw and socket joints and fitted with hardened steel tip and driving cap.
- (viii) Earth plates will not be permitted
- (ix) Where an earth rod is used the earth resistance shall be tested in the manner described in the current edition of the IEE Regulations, by the Sub-Contractor in the presence of the Engineer and the Sub-Contractor shall be responsible for the supply of all test equipment.
- (x) Where copper tape is fixed to the building structure it shall be by means of purpose made non-ferrous saddles which space the conductor away from the structure a minimum distance of 20mm. Fixings, shall be made using purpose made plugs; No fixings requiring holes to be drilled through the tape will be accepted.
- (xi) Joints in copper tape shall be tinned before assembly riveted with a minimum of two copper rivets and seated solid.
- (xii) Where holes are drilled in the earth tape for connection to items of equipment the effective cross sectional area must not be less than required to comply with the IEE regulations.
- (xiii) Bolts, nuts and washers for any fixing to the earth tape must be of non-ferrous material.
- (xiv) Attention is drawn to the need for the earthing metal parts of lighting fittings and for bonding ball joint suspension in lighting fittings.

2.16 CABLES AND FLEXIBLE CORDS

All cables used in this Sub-Contract shall be manufactured in accordance with the current appropriate Kenya standard Specification which are as follows:-

P.V.C. Insulated Cables and Flexible Cords	-	Ks 04-192:1988
PVC Insulated Armoured Cables	-	Ks 04-194:1990
Armouring of Electric cables	-	Ks 04-290:1987

The successful Sub-Contractor will, at the Engineers discretion be required to submit samples of cables for the Engineers approval; the Engineer 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 500/1000 volt grade. No cables smaller than 1.5mm² shall be used unless otherwise specified. The installation and the finish of cables shall be as detailed in later clauses. The colour of cables shall conform with the details stated in the “Cable Braid and insulation Colours” Clause.

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

Shall be 600/1000 volt grade manufactured to Ks 04-194:1988 and Ks 04-187/188 with copper stranded conductors.

The wire armour of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armour shall have a resistance not more than twice of the largest current carrying conductor of the 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 cable is run on the surface or recessed into the wall.

2.18 CABLE SUPPORTS, MARKERS AND TILES

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

Alternatively, fixing shall be by BICC claw type cleating system with die-cast cleats and galvanised 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 backstraps described above which shall in turn be secured to walls or ceilings of ducts by rawbolts.

In excessively damp or corrosive atmospheric conditions special finishes may be required and the Sub-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 blackstraps 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 methods described above or other system which has received prior approval of the Engineer;

Cables are to be kept clear of all pipe work and the Sub-contractor shall work in close liaison with other services Sub-contractors.

The Sub-Contractor shall include for the provision of fixing of approved type coloured slip on cables end markers to indicate permanently the correct phase and neutral colours 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 laid over which shall be provided and laid under this Sub- contract.

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

2.19 PVC INSULATED CABLES

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

PVC cables shall conform to the details of the “Cables and Flexible cords” and “Cable Braid and Insulation Colours” clauses.

2.20 HEAT RESISTING CABLES

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

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

2.21 FLEXIBLE CORDS

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

Circular white twin TRS flex shall be used for plain pendant fittings up to 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 Cables” Clause 30).

2.22 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 Hellerman rubber slip on cable end markers.

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

2.23 CABLE INSULATION COLOURS

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

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

	<u>SYSTEM</u>	<u>INSULATION COLOUR</u>	<u>CABLE END MARKER</u>
	Main and Sub-Main		
	a) Phase	Red	Red
	b) Neutral	Black	Black
1)	Sub-Circuits		
	Single Phase		
	a) Phase	Red	Red
	b) Neutral	Black	Black

2.24 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 of ten switched 13 Amp 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 this specification.

2.25 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.

2.26 INSULATION

The insulation resistance to earth and between poles of the whole wiring system, fittings and lumps, 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 before the installations are handed over.

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

2.27 LIGHTING SWITCHES

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

2.28 SOCKETS AND SWITCHED SOCKETS

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

They shall be 13- Amp, 3-pin, shuttered, switched and as manufactured by “M.K. Electrical Co. Ltd.”, or other approved equal to KS 04 – 246: 1987

2.29 FUSED SPUR BOXES

These shall be flush, D.P switched as in steel/pvc box and of type and make specified in the drawings complete with pilot light and as manufactured by “M. K. Electrical Company Ltd”, or other approved equal. KS 04 – 247: 1988

2.30 COOKER OUTLETS

These shall be flush mounted with 13-A switched socket outlet and neon indicator Lamps. The cooker control units shall be as manufactured by “M.K. Electrical Company Ltd”, or other approved equal KS 04 – 247: 1988

2.31 CONNECTORS

Shall be specified in the drawings and appropriate 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.

2.32 LAMPHOLDERS

Shall be of extra heavy H.O skirted and shall be provided for every specified lighting fitting and shall be B.C., E.S., or G.E.S as required. All E.S. and G.E.S. holders shall be heavy brass type (except for

plain pendants where the reinforced bakelite type shall be used). The screwed cap of the E.S and G.E.S. holders shall be connected to the neutral.

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

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

2.33 LAMPS

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

Tungsten filament lamps shall be manufactured in accordance with KS 04 – 112:1978 for general service lamps and KS 04 – 307:1985 for lamps other than general services. Tubular fluorescent lamps shall comply with KS 04 – 464:1982

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

2.34 LIGHTING FITTINGS AND STREET LIGHTING LANTERNS

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

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

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

The whole of the metal work of each lighting fittings shall be effectively bonded to earth. In the case of ball and/or knuckle joints short lengths of flexible cable shall be provided, bonded to the metal work on either side of the joints. If the above provisions are not made by the manufacturers -, the Sub-contractor shall include cost of additional work necessary in his tender. See “Flexible Cords” clause for details of internal wiring of lighting fittings. Minimum size of internal wiring shall be 20/0.20mm (23/0067). Each lighting fitting shall be provided with number type and size of lamps as detailed on the drawings. It is to be noted that some fittings are suspended as shown on the drawings.

Where two or more points are shown adjacent to each other on the drawings, e.g socket outlet and telephone outlet, they shall be lined up vertically or horizontally on the centre lines of the units concerned.

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

2.35 POSITIONS OF POINTS AND SWITCHES

Although the approximate positions of all points are shown on the drawings, enquiry shall be made as to the exact positions of all M.C.B panels, lighting points, socket outlets etc, before work is actually commenced. The Sub-contractor must approach the Architect with regard to the final layout of all lights on the ceiling and walls.

The Sub-contractor must consult with the Engineer in liaison with the Clerk of Works, or the General Foreman on site regarding the positions of all points before fixing any conduit etc. The Sub-Contractor shall be responsible for all alterations made necessary by the non-compliance with the clause.

2.36 STREET/SECURITY OUTDOOR LIGHTING COLUMNS:

The column shall be at a minimum of 225mm in the ground on 75mm thick concrete foundations and the pole upto 150mm shall be surrounded with concrete. The top bracket and plain section of the columns shall be common to and interchangeable with all brackets with maximum mismatching tolerance of 3mm between any pole and bracket. After manufacture and before erection the columns shall be treated with an approved mordant solution which shall be washed off and the whole allowed to dry. Thereafter, the columns shall be painted with one undercoat and two coats of gloss paint to an approved colour. All columns shall be complete with fused cut-outs.

2.37 TIMING CONTROL SWITCH

These shall be installed where shown on the drawings. Photocell timing control circuits which will operate 'on' with a specified level of darkness and 'off' with a given level of light. The initial adjustment will be done with approval of the Electrical Engineer.

2.38 WIRING SYSTEM FOR STREETLIGHTING

Cables shall be as indicated on the drawings, and shall be laid in a cable trench 450mm deep along the road sides and 600mm deep across the roads and 900mm away from the road kerb or 1500mm away from the edges of the road. 'Loop-in' and 'Loop-out' arrangement shall be used at every pole. Wiring to the lanterns on each pole shall be with 1.5mm² PVC twin insulated and sheathed cable with earth wire shall be laid at least 600mm below the finished road level on a compact bed of murram at least 50mm thick and covered with a concrete surrounded 150mm thick.

2.39 METAL CONTROL PILLAR

These shall be metal clad and fabricated as per contract drawings and specification. The Sub-Contractor shall supply, install, test and commission control pillars including supplying, fixing connecting switchgears as detailed on the appropriate drawings.

2.40 CURRENT OPERATED EARTH LEAKAGE CIRCUIT BREAKER

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

The breaker shall be provided with test switch and fitted in weather proof enclosure for surface mounting. The rated load current and earth fault operating current shall be as specified in the drawings. These shall be as manufactured by Crabtree, Siemens or other equal and approved.

2.41 M.V. SWITCHBOARD AND SWITCHGEAR

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

The switchboard shall comprise the equipment shown on the drawings together with all current transformers, auxiliary fuses, labels, small wiring and interconnections necessary for the satisfactory operation of the switchboard. Switchboard shall be of the flush fronted, enclosed, metal clad type with full front or rear access as called for in the particular specifications, suitable for indoor use, sectionalized as necessary to facilitate transport and erection. The maximum height of the switchboard is to be approximately 2.0 meters. A suitable connection chamber containing all field terminals shall be provided at the top or bottom of the switchboard as appropriate.

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

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

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

Switches and fuse switches, shall be in strict accordance with KS04-183:1978 Class 2 switches. Means of locking the switch in the “OFF” position shall be provided.

All fuse switches shall comply with KS04-183:1978, PARTS 2 and 3 a fault rating at least equal to the fault rating of the switchboard in which they are installed. Cartridge fuse links to KS 04-183:1978 category A.C. 46, class Q1 and fusing factor not exceeding 1.5 shall be supplied with each fused switch.

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

2.42 STEEL CONDUITS AND STEEL TRUNKING

Conduits shall be of heavy gauge class “B” welded to Standard specification KS 04-180:1985. In no case will conduit smaller than 20mm diameter be used on the works. Conduits installed within buildings shall be black enameled finish except where specified otherwise. Where installed externally or in damp conditions they shall be galvanised. Conduit fittings, accessories or equipment used in

conjunction with galvanised conduits shall also be galvanised or otherwise as approved by the service engineer.

Metal trunking shall be fabricated from mild steel of not less than 18 swg. All sections of trunking shall be rigidly fixed together and attached to the framework or fabric or the building at intervals of not less than 1.2m. Joint trunking shall not overhang fixing points by more than 0.5m.

All trunking shall be made electrically continuous by means of 25 x 3mm copper links across each joint and where the trunking is galvanised, the links shall be made by galvanised flat iron strips.

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

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

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

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

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

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

Where a wiring system incorporates galvanised conduit and trunking, the trunking shall be deemed to be galvanised unless specified otherwise.

The number of cables to be installed in trunking shall be such as to permit easy drawing in without damage to the cables, and shall in no circumstances be such that a space factor of 45% is exceeded.

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

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

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

All boxes shall conform to KS 04 – 668: 1986, to be of malleable iron, and black enamelled or galvanised according to the type of conduit specified. All accessory boxes shall have threaded brass inserts.

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

All adaptable boxes and lids of the same size shall be interchangeable.

Boxes used on surface work are to be tapped or drilled to line up with the conduit fixed in distance type saddles allowing clearance between the conduit and wall without the need for setting the conduit. Where used in conjunction with mineral insulated copper sheathed cable, galvanised boxes shall be used and painted after erection.

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

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

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

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

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

2.43 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 the Electric Supply Company's By-Laws.

- (a) Tests shall be carried out to prove that all single pole switches are installed in the 'live' conductor.
- (b) Tests shall be carried out to prove that all socket outlets and switched socket outlets are connected to the 'live' conductor in the terminal marked as such, and that each earth 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 results 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 regulations referred to above.

(d) Any faults, defects or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation made apparently by such inspections or tests shall be rectified by the 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 services engineer's approval and as specified elsewhere in this specification or in standards and regulations already referred to, all equipment, plant and apparatus forming part of the works and before connecting to any power or other supply and setting to work.

Where such equipment, etc., forms part of or is connected to a system whether primarily or of an electrical nature or otherwise (e.g. air conditioning system) the 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.

APPENDIX TO GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

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

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

ITEM	DESCRIPTION	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>	
	<u>BILL NO. 1: PARTICULAR PRELIMINARIES</u>	
A	<u>PRICING ITEMS OF PRELIMINARIES</u> Prices SHALL BE INSERTED against items of “Particular and General Preliminaries” in the tenderer’s priced Bills of Quantities. Preliminaries to the contract are mandatory conditions and responsibilities the contractor is required to fulfill for the complete and proper execution of the contract. The contractor is advised to read and understand all his obligations under preliminaries. Should he find that fulfillment of any of the items will lead to him incurring any cost not covered under measured works he shall price such works accordingly. Items for which no price is entered will not be paid for but shall be deemed covered by other rates and prices in these Bills of Quantities. Value Added Tax (V.A.T.) shall be included in the individual prices or rates at the rate of 16%.	
B	<u>DESCRIPTION OF THE WORKS AND SCOPE OF CONTRACT</u> The works to be carried out under this contract involves; Construction of Tomatoes Aggrgation Centre at Togonye Market Centre Kirinyaga County as described in the Tender Bills of Quantities	
D	<u>LOCATION OF SITE</u> The sites of the proposed works are located at Togonye Market Centre, Murinduko Ward in Kirinyaga County . The Contractor is advised to liase with the client department and visit the site to familiarize with the nature and position of the site. No claims arising from the Contractor’s failure to do so will be entertained.	
C	<u>MEASUREMENTS</u> In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT MANAGER in accordance with Clause 22 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 22 of the said Conditions.	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<u>TENDER DOCUMENTS</u> Tender documents are as listed in Clause 2.1 of the Instruction to Tenderer's Page STD/8	
B	<u>VIEWING OF DRAWINGS</u> Any tenderer interested in viewing the drawings related to this project before submission of the tenders may do so by contacting the Director of Public Works, County Department of Transport and Infrastructure Head Office, Prisons Road, Kerugoya.	
C	<u>PRICING RATES</u> The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, taxes, and all other incidental expenses, all to comply with the said Conditions of Contract.	
D	<u>FIRM PRICE CONTRACT</u> This is a firm price contract and, therefore the tenderer shall not be reimbursed for any increases in the costs of materials and/or labour in the execution of the works except as provided under the fluctuations clause.	
E	<u>VALUE ADDED TAX</u> The Contractor's attention is drawn to the Legal Notice in the Finance Act part 3 Section 21(b) operative from 1 st September, 1993 which requires payment of VAT on all contracts. The contractor should therefore include allowance for V.A.T and other Government taxes currently in force for all his rates, provisional items and prime cost sums in this tender. The tenderer is advised that in accordance with Government public notice No. 35 & 36 Dated 11 th September 2003 operational from 1 st October 2003, VAT will be deducted against the contract sum at the prevailing rate by the Employer and remitted directly to the Commissioner of VAT through all interim certificates. It should however be noted that this is not additional tax but a new mode of payment for VAT, any excess payment will be refundable once the Contractor has submitted monthly returns to the Commissioner of VAT who will do the refunds when satisfied that the VAT regulations have been complied with. NB: The tenderers shall allow for for 16% V.A.T. in their rates	
F	<u>STANDARD FORMS</u> Any tender with standard forms not filled as appropriate will be treated as non-responsive.	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>DELIVERY OF TENDER</u></p> <p>Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited in the tender box as specified in the tender advertisement and or letter of invitation to tender. Tenders will be opened at the time specified in the advertisement and/or letter of invitation to tender. Tenders arriving later than the specified time will not be considered.</p>	
B	<p><u>CORRECTION OF ERRORS IN TENDER</u></p> <p>Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and the quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail.</p>	
C	<p><u>BID SECURITY</u></p> <p>The Bidder shall furnish, as part of his bid, a security as specified in the tender advertisement or letter of invitation to tender. The bid security shall, at the bidder's option, be in the form of a certified cheque, bank draft, standby letter of credit or guarantee duly signed, sealed and stamped from a bank or Insurance company which has been determined by the bidder to be acceptable to the Government. The format of the bid security shall be in accordance with the sample forms of bid security included in the post qualification forms, other formats may be permitted, subject to the prior approval of the Government.</p>	
D	<p>Bid Security shall be valid for a period of Thirty (30) days beyond the tender validity period.</p> <p><u>TENDER VALIDITY</u></p> <p>"Clause 3.6 of the Instructions to Tenderers has been amended to read: "Tenders shall remain valid for a period of Ninety (90) days from the date of Tender Opening. All Tenderers are advised to note this amendment when filling the Form of Tender".</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>PERFORMANCE BOND</u></p> <p>A bond of 5% of the contract sum will be required in accordance with Clause 28 on award of contract of the Instructions to Tenderer's. No payment on account for the works executed will be made to the contractor until he has submitted valid Performance Bond to the EMPLOYER duly signed, sealed and stamped from an approved Bank or Insurance Company.</p>	
B	<p><u>CONTRACT COMPLETION PERIOD</u></p> <p>The contract completion period in accordance with condition 31 of the Conditions of contract must be adhered to.</p> <p>The PROJECT MANAGER shall strictly monitor the Contractors progress in relation to the progress chart and should it be found necessary the PROJECT MANAGER shall inform the Contractor in writing that his actual performance on site is not satisfactory. In all such cases the Contractor shall accelerate his rate of performance production and progress by all means such as additional labour, plant, e.t.c and working overtime all at</p>	
C	<p><u>URGENCY OF THE WORKS</u></p> <p>The Contractor is notified that these "works are urgent" and should be completed within the period stated in Contract Agreement. The Contractor shall allow in his rates for any costs he/ she deems that he/she may incur by having to complete these works within the stipulated contract period.</p>	
D	<p><u>PROGRESS CHART.</u></p> <p>The Contractor shall provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds.</p>	
E	<p><u>INSURANCE</u></p> <p>The Contractor shall insure as required in Condition No.30 of the Conditions of contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the PROJECT MANAGER either by production of an insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clause have been complied with in all respects. Thereafter the PROJECT MANAGER shall from time to time ascertain that the premiums are duly paid up by the Contractor, who, if called upon to do so, shall produce receipted premium renewals for the PROJECT MANAGER's inspection.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>WORKING CONDITIONS</u></p> <p>The Contractor shall allow in his rates for any interference that he may encounter in the course of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed.</p>	
B	<p><u>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</u></p> <p>The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is thus instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of activities being carried out by the Client. The Contractor shall allow in his rates any expense he deems necessary by taking such care within the site.</p>	
C	<p><u>EXISTING BUILDINGS AND SERVICES</u></p> <p>Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.</p>	
D	<p><u>ADJOINING PROPERTY</u></p> <p>The contractor is advised to take all necessary precautions to prevent damage to adjoining property. Any damage occurring must be made good to the satisfaction of the PROJECT MANAGER and/or owner(s) of the adjoining property at the contractor's expense.</p>	
E	<p><u>LABOUR CAMPS</u></p> <p>The Contractor shall not be allowed to house labour on site. Allow for transporting workers to and from the site during the tenure of the contract.</p>	
F	<p><u>NCA, NEMA, WELFARE, OCCUPATIONAL HEALTH AND SAFETY STATUTORY REQUIREMENTS</u></p> <p>The Contractor must take all necessary measures to ensure total compliance in all respects with the current statutory requirements in relation to the National Construction Authority, National Environment Management Authority, Public/ Occupational Health and Safety and Staff / Workers Welfare during the both the contract and defects liability periods.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>HOARDING</u></p> <p>The Contractor shall enclose all the site under construction with a hoarding 2400 mm high consisting of iron sheets gauge 30 on 100 x 50 mm 2nd grade treated sawn cypress timber posts firmly secured at 1800 mm centres with two 75 x 50 mm 2nd grade treated sawn cypress timber rails. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.</p> <p><i>Insert a Rate of KSh per R/M- Approx 60m Long PER SITE</i></p> <p>Advertisements shall not be displayed on the hoarding unless the prior permission of the PROJECT MANAGER in writing has been obtained.</p>	
B	<p><u>USE OF SITE</u></p> <p>The contractor shall not use the site for any other purpose other than carrying out the contract works.</p>	
C	<p><u>PAYMENTS</u></p> <p>The tenderer's attention is drawn to the fact that the COUNTY GOVERNMENT SHALL NOT MAKE ANY ADVANCE PAYMENTS. Payments are shall only be made for work done and materials delivered to site: all in accordance with Clause 23 of the Conditions of Contract Agreement. In order to facilitate this, a list of the general component elements for the works is given at the summary page of these specifications and the tenderer is requested to break down his tender sum commensurate to</p>	
D	<p><u>PAYMENT FOR MATERIALS ON SITE</u></p> <p>All materials for incorporation in the works must be stored on site before payment is effected, unless specifically exempted by the PROJECT MANAGER. This is to include materials of the Contractor, nominated sub- Contractors and nominated suppliers.</p>	
E	<p><u>CLAIMS</u></p> <p>It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and / or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such a claim or intent to claim notice to the PROJECT MANAGER in accordance with Clauses 19 and 24 of the conditions of contract within the contract period. No claim shall be entertained if the contractor has not complied with the said conditions or upon the expiry of the said contract</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<u>PROJECT IDENTIFICATION AND PUBLICITY SIGNBOARD</u> Allow a Provisional Sum of Kenya Shillings Thirty Thousand (Kshs. 30,000/=) only for the Project Identification and Publicity Signboard Signage to be expended in accordance with the PROJECT MANAGER written instructions	30,000.00
B	<u>PROJECT CONTRACTOR'S SIGNBOARD</u> Allow a Provisional Sum of Kenya Shillings Ten Thousand (Kshs. 10,000/=) only for the Project Signboard Signage to be expended in accordance with the PROJECT MANAGER written instructions	10,000.00
C	<u>PROJECT OVERSITE SUBSISTENCE ALLOWANCES</u> Provide a Provisional Sum of Kenya Shillings One Hundred Thousand (Kshs. 100,000/=) only for the Project Supervision Subsistence Allowances to be expended as directed by the Project Manager or deducted in whole	100,000.00
D	<u>PROJECT SUPERVISION SUBSISTENCE ALLOWANCES</u> Provide a Provisional Sum of Kenya Shillings Two Hundred Thousand (Kshs. 200,000/=) only for the Project Supervision Subsistence Allowances to be expended as directed by the Project Manager or deducted in whole	200,000.00
E	<u>PROJECT MANAGEMENT STATIONERY EXPENSES</u> Provide a Provisional Sum of Kenya Shillings One Hundred Thousand (Kshs. 100,000/=) only for the Project Supervision Subsistence Allowances to be expended as directed by the Project Manager or deducted in whole	100,000.00
	<i>Carried to collection</i>	440,000.00

ITEM	DESCRIPTION	AMOUNT-KSHS
II	<p><u>PARTICULARS OF INSERTIONS TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u></p> <p>The following are the insertions to be made in the appendix to the Contract Agreement: -</p> <p>Period of Final Measurement 3 Months From Practical completion</p> <p>Defects Liability Period 6 Months from Practical completion</p> <p>Date for Possession To be agreed with the Project Manager</p> <p>Date for Completion To be 30 Weeks from the date of Site Possession</p> <p>Liquidated and Ascertained damages At the rate of 0.05% of the Contract Sum per day</p> <p>Period of Interim Certificates Monthly</p> <p>Period of Honouring Certificates 30 days</p> <p>Percentage of Certified Value Retained 10%</p> <p>Limit of Retention Fund 10%</p> <p>The Price Adjustment Clause SHALL NOT apply</p> <p>Price for VAT should be included in the tenderer's rates</p>	

ITEM	DESCRIPTION	AMOUNT-KSHS
	<u>COLLECTION</u>	
	Brought forward from page PP/1	
	Brought forward from page PP/2	
	Brought forward from page PP/3	
	Brought forward from page PP/4	
	Brought forward from page PP/5	
	Brought forward from page PP/6	
	Brought forward from page PP/7	440,000.0
	Brought forward from page PP/8	0
	TOTAL FOR PARTICULAR PRELIMINARIES CARRIED TO GRAND SUMMARY	

ITEM	DESCRIPTION	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>	
	<u>BILL NO. 2: GENERAL PRELIMINARIES</u>	
A	<p>PRICING ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specifications.</p> <p>The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.</p>	
B	<p>ABBREVIATIONS</p> <p>Throughout these Bills, units of measurement and terms are abbreviated and shall be all the requirements for the proper execution of the whole of the works in the Contract.</p> <p><i>C.M.</i> Shall mean cubic metre</p> <p><i>S.M.</i> Shall mean square metre</p> <p><i>L.M.</i> Shall mean linear metre</p> <p><i>MM</i> Shall mean Millimetre</p> <p><i>Kg.</i> Shall mean Kilogramme</p> <p><i>No.</i> Shall mean Number</p> <p><i>Prs.</i> Shall mean Pairs</p> <p><i>B.S.</i> - Shall mean the British Standard Specification Published by the British Standards Institution, 2 Park Street, London W.I., England.</p> <p><i>Ditto</i> - Shall mean the whole of the preceding description except as qualified in the description in which it occurs.</p> <p><i>m.s.</i> Shall mean measured separately.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>METHOD OF MEASUREMENT</u></p> <p>Notwithstanding any contrary provision in the conditions of contract all quantities shall be deemed to have been prepared in accordance with current edition of the Standard Method of Measurement of Building Works for the Republic of Kenya.</p> <p>The rates set down by the contractor against each item in the particular specifications shall, unless otherwise expressly provided to the contrary, or unless there is a separate item for extra labour, cutting or waste, be held to include for waste of materials, carriage and cartage, carrying in and return of empties, hoisting, setting, fitting and fixing in position, making and all other labour and everything else necessary for the proper completion of each item and for establishment charges and profit. Each items of cutting shall include for consequent waste.</p>	
B	<p><u>EXCEPTIONS TO THE STANDARD METHOD OF MEASUREMENT</u></p> <p><u>Attendance:</u> Clause B19(a) of the Standard Method of Measurement is deleted and the following clause is substituted:-</p> <p>Attendance on nominated Sub-Contractors shall be given as an item in and shall be deemed to include: allowing use of standing scaffolding, messrooms, sanitary conditions and welfare facilities; provision of special scaffolding where necessary, office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading checking and hoisting: providing electric power: and removing and replacing duct covers, pipe casings and and the like necessary for the execution and testing of Sub- Contractors' work and being responsible for the accuracy of the same.</p> <p><u>Fix Only:-</u></p> <p>"Fix Only" shall mean take delivery at nearest major supply centre, pay all demurrage charges, load and transport to site where necessary, unload, store, unpack, assemble as necessary, distribute to position, hoist and fix only.</p>	
C	<p><u>ALTERATIONS TO BILLS, PRICING, ETC.</u></p> <p>Any unauthorised alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities. All items of measured work shall be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<u>EMPLOYER</u> The "Employer" is the COUNTY GOVERNMENT OF KIRINYAGA. The term "Employer" and "Government" wherever used in the contract document shall be synonymous	
B	<u>PROJECT MANAGER</u> The term "PROJECT MANAGER" wherever used in these Bills of Quantities shall be deemed to imply the person defined in Condition 1 of the Conditions of Contract hereby attached or such person or persons as may be duly authorised to represent him on behalf of the Government.	
C	<u>ARCHITECT</u> The term "Architect" shall be deemed to mean "The PROJECT MANAGER" as defined above whose address unless otherwise notified is the County Department of Transport, Roads and Public Works , P.O. Box 390, KERUGOYA.	
D	<u>QUANTITY SURVEYOR</u> The term "Quantity Surveyor" shall be deemed to mean "The PROJECT MANAGER" as defined above whose address unless otherwise notified is the County Department of Transport, Roads and Public Works , P.O. Box 390, KERUGOYA.	
E	<u>ELECTRICAL ENGINEER</u> The term "Electrical Engineer" shall be deemed to mean "The PROJECT MANAGER" as defined above whose address unless otherwise notified is the County Department of Transport, Roads and Public Works , P.O. Box 390, KERUGOYA.	
F	<u>MECHANICAL ENGINEER</u> The term "Mechanical Engineer" shall be deemed to mean "The PROJECT MANAGER" as defined above whose address unless otherwise notified is the County Department of Transport, Roads and Public Works , P.O. Box 390, KERUGOYA.	
G	<u>STRUCTURAL ENGINEER</u> The term "Structural Engineer" shall be deemed to mean "The PROJECT MANAGER" as defined above whose address unless otherwise notified is the County Department of Transport, Roads and Public Works , P.O. Box 390, KERUGOYA.	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>FORM OF CONTRACT</u></p> <p>The form of contract will be the one included in the Republic of Kenya's (PPOA) Standard Tender Document for Procurement of Works (2006 Edition) hereby attached and Conditions of Contract are those attached thereto. If the Contractor considers that compliance with any of the Conditions of Contract involves any expenses distribute them among his rates for the various items in the Bills of Quantities. No claim shall be allowed arising from the Contractors compliance with <u>any of the Conditions of Contract</u>. These are numbered from 1 to 37 as set out on pages 18 to 40 of these tender documents. Particulars of the insertion to be made in the Appendix of the Appendix of the Contract Agreement will be found in the Particular Preliminaries of these Bills of Quantities.</p> <p><u>Conditions of Contract</u></p> <p>These are as contained in these tender documents.</p> <p>Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of</p>	
B	<p><u>GENERAL SPECIFICATIONS.</u></p> <p>For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads, Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.</p>	
C		
D	<p><u>WORKS</u></p> <p>Except as amplified under the item "Insurance" in these Preliminaries, the word "Works" in the Particular Specification shall include the work of all sub contractors and shall include all the approved variations.</p>	
E	<p><u>VISIT SITE AND EXAMINE DRAWINGS.</u></p> <p>The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which may affect his tender his tender.</p> <p>No claim arising from his failure to comply with this recommendation will</p> <p><u>AREA TO BE OCCUPIED BY THE CONTRACTOR</u></p> <p>The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be</p>	

	defined on site by the PROJECT MANAGER.	
	Carried to collection	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>ACCESS TO SITE AND TEMPORARY ROADS.</u></p> <p>Means of access to the site shall be agreed with the PROJECT MANAGER prior to commencement of the work and contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including provision of temporary culverts, crossings, bridges, or any other means of gaining access to the site. Upon completion of the works, the contractor shall remove such temporary access roads, culverts, bridges, etc. and make good and reinstate all works and surfaces disturbed to the satisfaction of the PROJECT MANAGER.</p>	
B	<p><u>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</u></p> <p>The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the PROJECT MANAGER . The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost. Nominated Sub-contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.</p>	
C	<p><u>SANITATION OF THE WORKS</u></p> <p>The Sanitation of the works shall be arranged and maintained by the Contractor in accordance with Public Health and Labour Departments requirements and to the satisfaction of the the PROJECT MANAGER. The Pit latrines shall be enclosed with framing and corrugated iron sheet roof, side and partition. The site of the latrine shall be agreed with the PROJECT MANAGER and the works shall not be commenced before the sanitary accommodation has been approved by the PROJECT MANAGER and the above mentioned authorities. The contractor will be required to pay employ sufficient sewwppers on the site to ensure clean maintenance and daily disinfecting of the latrines and not less than once per week, the whole area and the enclosures shall be sprayed with disinfectant and insecticide and on completion the works, the latrines shall be removed and all works and surfaces disturbed made good and the whole area disinfected and left clean and free from pollution to the satisfaction of the PROJECT MANAGER and local authorities.</p>	

	Carried to collection	
--	------------------------------	--

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>SECURITY OF WORKS ETC.</u></p> <p>The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of the public. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers.</p>	
B	<p><u>OFFICE FOR THE PROJECT MANAGER</u></p> <p>The contractor shall provide, erect and maintain where directed on site and afterwards dismantle the Site Office of the type noted in the particular preliminaries, complete with furniture. He shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect maintain a lock-up pedestral type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction Government and Medical Officer of Health and pay the services of a cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be complete before the contractor is permitted to commence the works. The Contractor shall make available on site as and when required by the PROJECT MANAGER a modern and accurate level together with levelling staff,</p>	
C	<p><u>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</u></p> <p>The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the PROJECT MANAGER and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	
D	<p><u>TRANSPORT.</u></p> <p>Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>SCAFFOLDING, PLANT, TOOLS AND VEHICLES</u></p> <p>Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for formwork, scaffolding or temporary works of any kind shall be used afterwards in the permanent work.</p>	
B	<p><u>SETTING OUT</u></p> <p>The PROJECT MANAGER shall furnish to the contractor either by way of carefully dimensioned drawings or by personnel supervision at the time of setting out the works such information as shall enable the contractor to set out the enclosing walls of the building at ground level after which the contractor shall be responsible and shall at his own cost amend any errors arising from his own inaccurate setting out unless the PROJECT MANAGER shall state otherwise in writing.</p>	
C	<p><u>MATERIALS AND WORKMANSHIP.</u></p> <p>All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials from local sources as early as necessary to ensure that they are on site when required for use in the the works. The Bills of Quantities shall not be used for the purpose of ordering</p>	
D	<p><u>STORAGE OF MATERIALS</u></p> <p>The Contractor shall provide at his own risk and cost where directed on the site weatherproof lockup sheds for the safe storage and custody of materials for the works and for the use of workmen engaged thereon and shall remove such sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the PROJECT MANAGER. Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.</p>	
E	<p><u>MATERIALS ON SITE</u></p> <p>All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected unless specifically exempted by the PROJECT MANAGER. This includes the materials of the Main Contractor, Nominated Sub-Contractors and Nominated Suppliers.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>MATERIALS ARISING FROM EXCAVATIONS</u></p> <p>Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the PROJECT MANAGER Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.</p>	
B	<p><u>MATERIALS FROM DEMOLITIONS</u></p> <p>Any materials from demolitions and not re-used shall become the property of the Client/User. The Contractor shall allow in his rates for the cost of transporting, storing and securing the materials on site as directed by the PROJECT MANAGER.</p>	
C	<p><u>SIGN FOR MATERIALS SUPPLIED.</u></p> <p>The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking delivery thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and replacements of any such loss or damage with articles and/or materials which will be supplied by the PROJECT MANAGER at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the PROJECT MANAGER.</p>	
D	<p><u>PUBLIC AND PRIVATE ROADS.</u></p> <p>Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the PROJECT MANAGER</p>	
E	<p><u>EXISTING PROPERTY.</u></p> <p>The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the PROJECT MANAGER</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>QUALITY OF THE WORKS</u></p> <p>The works should be of high quality and the contractor will be required to make samples of the work to be executed for approval by the PROJECT MANAGER before he commences the carrying out of the works. The contractor should allow for sample works in his rates accordingly. Incase a sample does not meet the standards set by the Project Manager, the contractor shall be expected to make another sample at his cost until it is approved by the PROJECT MANAGER.</p>	
B	<p><u>SAMPLES</u></p> <p>The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the PROJECT MANAGER for his approval until such samples are approved by the PROJECT MANAGER and the PROJECT MANAGER, may reject any materials or workmanship not in his opinion to be up to approved samples. The PROJECT MANAGER shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the PROJECT MANAGER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Materials Branch, Ministry of Transport and Infrastructure. The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the PROJECT MANAGER The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub-contractors' work.</p>	
C	<p><u>GOVERNMENT ACTS REGARDING WORKPEOPLE ETC.</u></p> <p>Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople.</p>	

	<p>The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps , passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organisation of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>SUPERVISION AND WORKING HOURS</u></p> <p>The works shall be executed under the direction and to the entire satisfaction in all respects of the "PROJECT MANAGER" who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract. The working hours shall be those generally worked by good employers in the in the Building and Civil Engineering trades in Kenya. No work shall be carried out at night or on gazetted holidays unless the PROJECT MANAGER shall so direct. No work shall be covered up nor shall any concreting be carried out in the in the absence of the Clerk of Works without prior approval of the PROJECT MANAGER in writing.</p>	
B	<p><u>PROTECTION OF THE WORKS.</u></p> <p>Provide protection of the whole of the works contained in the Bills of Quantities, including casing, casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the PROJECT MANAGER and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Government.</p>	
C	<p><u>BLASTING OPERATIONS</u></p> <p>Blasting will only be allowed with the express permission of the PROJECT MANAGER in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the PROJECT MANAGER governing the use and storage of explosives.</p>	
D	<p><u>REMOVAL OF RUBBISH AND SITE CLEARANCE ETC.</u></p> <p>The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean and tidy state to the reasonable satisfaction of the PROJECT MANAGER</p>	
E	<p><u>WORKS TO BE DELIVERED UP CLEAN</u></p> <p>Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the PROJECT MANAGER.</p>	

	Carried to collection	
--	------------------------------	--

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>PROVISIONAL SUMS.</u></p> <p>The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7(i) of the Standard Method of Measurement mentioned in Condition No. 16 of the conditions of Contract. Such sums are net and no addition shall be made to them for profit.</p>	
B	<p><u>ADJUSTMENT OF PROVISIONAL SUMS.</u></p> <p>In the Final Account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER's order added to the Contract Sum. Such work shall be valued as described for variations in condition No. 22 of the Conditions of Contract, but should any part of the contract be executed by a nominated Sub-Contractor, or any articles for the Work be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.</p>	
C	<p><u>PRIME COST (OR P.C.) SUMS.</u></p> <p>The term "Prime Cost Sum" or "P.C. Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement mentioned in Condition No. 16 of the conditions of Contract. Persons or firms nominated by the PROJECT MANAGER to execute work or to provide and fix materials or goods as stated in Condition No. 20 of the Conditions of Contract are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.</p>	
D	<p><u>ADJUSTMENT OF P.C. SUMS.</u></p> <p>In the Final Account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER's order in respect of each of them added to the Contract sum. The Contractor shall provide to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance" (as previously described) following P.C. Sums shall be adjusted pro-rata to the physical extent of the work executed (not pro-rata to the amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them. Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities, profit and attendance will be allowed at the same rate as it would be if the work were executed by a</p>	

Nominated Sub-Contractor.	
<i>Total to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<p><u>NOMINATED SUB-CONTRACTORS</u></p> <p>When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts as described in Condition No 8 of the Conditions of Contract and shall thereafter be responsible for such sub contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub-Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract contractor's work concerned in the P.C. Sums under the description "Add for Attendance".</p>	
B	<p><u>DIRECT CONTRACTS</u></p> <p>Notwithstanding the foregoing conditions, the Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In the instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed.</p>	
C	<p><u>ATTENDANCE UPON OTHER TRADESMEN, ETC.</u></p> <p>The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills.</p>	
D	<p><u>PROVISIONAL WORK</u></p> <p>All work described as "Provisional" in these Bills of Quantities is subject to remeasurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the PROJECT MANAGER Immediately the work is ready for measuring, the Contractor shall give notice to the PROJECT MANAGER. If the Contractor makes default in these respects he shall if the PROJECT MANAGER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense.</p>	
	<i>Carried to collection</i>	

ITEM	DESCRIPTION	AMOUNT-KSHS
A	<u>TRAINING LEVY</u> Legal notice No. 237 of October, 1971 requires payment by the contractor of a training levy of a quarter percent (1/4 %) of the value of the contract where the contract value exceeds KShs. 50,000/=. The contractor will be required to furnish the PROJECT MANAGER with a receipt showing that he has paid the required Training Levy to the Director of Industrial Training. In case the contractor fails to furnish the said receipt to thePROJECT MANAGER, the Client will pay the amount to the Director of Industrial Training from monies due to the contractor.	
	<i>Carried to collection</i>	
	<u>COLLECTION</u> Brought forward from page GP/1 Brought forward from page GP/2 Brought forward from page GP/3 Brought forward from page GP/4 Brought forward from page GP/5 Brought forward from page GP/6 Brought forward from page GP/7 Brought forward from page GP/8 Brought forward from page GP/9 Brought forward from page GP/10 Brought forward from page GP/11 Brought forward from page GP/12 Brought down from above	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO RAND SUMMARY	

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>BILL NO. 3: CIVIL WORKS (ALL PROVISIONAL)</u>				
1	<u>ELEMENT NO. 1: PAVING WORKS</u>				
	<u>Site clearance and demolitions</u>				
A	Cut down existing trees, remove stumps; dipose arisings as directed offsite; backfill excavations and make good all disturbed itemsand surfaces - Girth average 1.3m (20 No.)		Item		
B	Allow for carefully demolishing and /or clearing the site off all existing temporary structures comprising of market shades, stalls, benches, worktops, etc; handle the arisings on site as directed by the Project Manager (Area approx. 2400 SM)		Item		
	<u>Excavations including maintaining and supporting sides and keeping free from from all water, mud and any fallen material</u>				
C	Oversite to remove top vegetable soil average 150mm deep, load, wheel and deposit away at an approved dump site as directed by the Project Manager (Distance approx. 20 KM - Return trip)	2,322	Sm		
D	Excavate in black cotton soil to reduce levels not exceeding 1.50m deep from stripped level (Av. 900mm deep)	1,045	Cm		
	<u>Disposal</u>				
E	Load excavated materials wheel and deposit away at an approved dump site as directed by the Project Manager (Distance approx. 20 KM - Return trip)	1,045	Cm		
	<u>Filling</u>				
F	Roll and compact subgrade to archive 98% modified proctors MDD including grading to falls and cross falls	2,322	Sm		
G	Imported approved quarry waste fill to make up levels under roads compacted in layers not exceeding 150mm to 95% MDD to the Project Manager's approval	1,045	Cm		
E	Total persistent herbicide to surfaces of hardcore bliding materials applied as per the manufacturer's specifications	2,322	Sm		
	TOTAL FOR GROUND WORKS CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
2	<u>ELEMENT NO. 2: PRECAST CONCRETE PAVING SLABS</u>				
A	50mm thick quarry dust blinding to receive precast concrete paving slabs (m.s)	1,700	Sm		
B	Total persistent herbicide treatment to surfaces of quarry dust	1,700	Sm		
	<u>Precast Concrete Products (grey); class 25/12mm including all necessary formwork and fair finished on exposed surface (as manufactured by Bamburi Special Products Ltd or other equal and approved)</u>				
C	600 x 600 x 50mm thick, laid to falls on quarry dust blinding (m/s); jointing and pointing in cement and sand (1:3) mortar	1,700	Sm		
D	125 x 250mm Kerb with once chamfered edge laid on and including 450 x 100mm plain concrete (1:3:6) foundation haunched up on one side including all necessary excavations formwork etc.	290	Lm		
TOTAL FOR PRE CAST PAVING SLABS CARRIED TO SECTION SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 3: CULVERTS LINES</u>				
	<u>1 NO. 6LM X 600MM DIAMETER CULVERT LINE</u>				
	<u>Excavations including maintaing and supporting sides and keeping bottoms free from water, mud and fallen materials</u>				
A	Excavate drainage trench average 1000mm wide and not exceeding a depth of 1500mm for 600mm internal diameter precast concrete ogee darin pipe culvert (m.s); Trim and compact bottoms of trenches to correct falls	5	Cm		
	<u>Disposal and filling</u>				
B	Return,fill and ram selected excavated material as top cover	2	Cm		
C	Load excavated materials wheel and deposit away at an approved dump site as directed by the Project Manager	3	Cm		
	<u>Mass concrete class 40 mix (1:3:6) in:</u>				
D	600mm internal diam. ogee drain pipe (m.s) bed and sorround	2	Cm		
	<u>Spun concrete ogee cylindrical pipes and fittings to B.S 556 part 2 laid to correct falls</u>				
	<u>Precast concrete class 25/12 including all necessary formwork, with clean edges, free from cracks, chips or broken corners</u>				
C	600mm internal diameter Ogee drain pipes laid in trench (m.s)	7	Lm		
	<u>2 NO. HEADWALLS FOR 600MM DIAMETER CULVERT</u>				
	<u>Excavations including maintaing and supporting sides and keeping bottoms free from water, mud and fallen materials</u>				
D	Excavate Pit for headwalls depth not exceeding 1000mm for 450mm diameter precast concrete ogee drain pipe (m.s)	2	Cm		
	<u>Disposal and filling</u>				
E	Return,fill and ram selected excavated material around the trenches	1	Cm		
F	Load excavated materials wheel and deposit away at an approved dump site as directed by the Project Manager	1	Cm		
	<i>Total Carried Forward</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought forward				
	<u>Plain concrete class 15 mix (1:4:8) in:</u>				
A	50mm thick blinding under concrete base (m.s)	2	Sm		
	<u>Insitu concrete; reinforced; class 20/20; mix 1:2:4;</u>				
A	Foundation	1	Cm		
B	150mm thick bed / apron	2	Cm		
C	200mm thick walls	6	Sm		
	<u>Sawn formwork as described to:-</u>				
D	Vertical sides of foundations and walls	14	Sm		
E	Edges of bed 75 - 150mm high	9	Lm		
	<u>Mesh fabric reinforcement to B.S 4483 and setting in concrete with 300 mm side and end laps (measured nett-allow for laps)</u>				
F	Ref. A142 bedded in concrete foundation, bed and walls (m.s)	8	Sm		
	<u>30mm thick cement and sand (1:4) screed steel trowelled smooth and to falls on:</u>				
G	Concrete bed/apron tops surface	4	Sm		
	<u>15mm thick cement and sand (1:4) plaster steel trowelled smooth on:</u>				
H	Concrete wall sides and top	7	Sm		
	TOTAL FOR 1 NO. CULVERT LINES CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 4: STORM WATER DRAINAGE</u>				
	<u>Excavations</u>				
	<u>Excavations to required depths and slopes including maintaing and supporting sides; keeping bottoms free from water, mud and fallen materials; grading bottoms, backfilling in appropriate material and loading and carting away surplus excavated materials</u>				
A	Drainage trench for 175 x 800 x 500 mm shallow IBD exceeding 300mm deep. Trim and compact the trenches to correct falls	180	Lm		
B	Ditto for 300 x 450 x 600 mm IBD not exceeding 1.0m deep. Trim and shape for IBD and 2 No. side slabs	120	Lm		
C	Ditto for 450 wide x 400mm deep average (internal dimesions) open "U" drain comprising 150mm thick concrete bed and sides	10	Lm		
	<u>Shallow Storm drain Around Building</u>				
D	100 mm thick imported approved hardcore base	144	Sm		
E	50mm thick concrete (1:3:6) hardcore (m.s) base blinding	144	Sm		
F	175 x 800 x 500 mm storm water channels on concrete bliding; bedded and jointed on cement and sand (1:3) mortar	180	Lm		
	<u>Outfall Open Storm Drains</u>				
A	100mm thick murram bed to bottom and sides of trench	54	Sm		
B	300 x 450 x 600 mm pre-cast concrete IBD laid and jointed in trench (m.s)	120	Lm		
C	Provide 2 no layers of 600 x 225mm high precast concrete side slabs side on each side of IBD	120	Lm		
	Total Carried Forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought Forward				
	<u>Open "U" Drain with Mild steel grating cover</u>				
	<u>Insitu concrete; reinforced; class 20/ (20mm); mix 1:2:4; vibrated</u>				
D	150mm thick wall and bed to stormwater channel	8	Sm		
E	BRC A142 Mesh Fabric reinforcement in bed and walls	8	Sm		
F	Sawn formwork to sides of stormwater channels	16	Sm		
G	25mm thick 2 No. coatwork cement sand (1:3) screed; wood floated to concrete bed	5	Sm		
H	15mm thick ditto render; wood floated to concrete walls	8	Sm		
	<u>Grating complete with three coats gloss oil paint</u>				
I	50 x 50 x 4mm angle framing to edge of concrete channel with and including 8mm diameter 150mm long lugs at 300 mm	20	Lm		
J	Channel grating comprising Y 25mm diameter bars welded to 40x40x4mm angle framing at 150mm centres	5	Sm		
	TOTAL FOR CARRIED TO SECTION SUMMARY				
	<u>BILL NO. 3: CIVIL WORKS (ALL PROVISIONAL)</u>				
	<u>SUMMARY</u>				
1	ELEMENT NO. 1: PAVING WORKS				
2	ELEMENT NO. 2: PRECAST CONCRETE PAVING SLABS				
3	ELEMENT NO. 3: CULVERTS LINES				
4	ELEMENT NO. 4: STORM WATER DRAINAGE				
	TOTAL FOR CIVIL WORKS CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>BILL NO. 4: 1NO. COVERED SHED SIZE 36.0 X 9.8 X 3.3M HIGH (ALL PROVISIONAL)</u>				
	<u>Excavations, Disposal and Fillings</u>				
A	Excavate pit column bases not exceeding 1.50m deep	18	Cm		
B	Return, fill-in and rum selected excavated materials around foundations	12	Cm		
C	Load, wheel and cart away surplus excavated materials and	6	Cm		
	<u>50mm thick mass concrete mix 1:4:8; to bottoms of:</u>				
D	Column bases	18	Sm		
	<u>Insitu concrete; reinforced; class 20/20); mix 1:2:4; vibrated</u>				
E	Column bases	7	Cm		
F	Stub Columns - 300 x 300 x 1250 mm high	2	Cm		
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including bends, hooks, tying wire and spacer blocks:</u>				
G	16mm diameter bars	207	Kg		
H	12mm ditto	211	Kg		
I	8mm ditto	62	Kg		
	<u>Sawn formwork as described to:-</u>				
J	Sides of Column bases	26	Sm		
K	Sides of Stub Columns	27	Sm		
	<u>Render; 15mm thick one coat cement :sand (1:3); wood floated to concrete or blockwork base generally to: -</u>				
L	Columns; Externally to fairface quality	11	Sm		
	<u>Total Carried to Collection</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Mild steel frame works, all welds/ connections to be well spotted and grounded smooth.</u>				
A	100 x 100 x 4mm SHS; 3300mm high Columns; one end welded to and including 200 x 200 x 3mm base plate with 4 x 18mm diameter holes; other welded to and including 150mm long x 100 x 50 x 3mm thick channel piece.	725	Kg		
B	100 x 50 x 3mm RHS in Top and Mid Rails	778	Kg		
C	75 x 50 x 3mm SHS in Lattice Girder Truss	1,210	Kg		
D	50 x 50 x 3mm SHS in Lattice Girder Truss	801	Kg		
E	50 x 50 x 3mm SHS in Cladding bearers	235	Kg		
F	100 x 50 x 2 mm Zed Purlins bolted to rafters (m.s)	1,255	Kg		
G	20mm diameter sag rods welded to rafters approval	591	Kg		
H	300 x 300 x 8mm thick base plate complete with 4 x 18mm diameter holes to receive 16mm diameter bolts (m.s) bedded on concrete and grouted with cement:sand (1:3) mortar	18	No		
I	450mm long x 16mm diameter mild steel hold down bolts complete with flanges, nuts and washers	72	No		
	<u>28 Gauge pre-painted IT4 or 1T5 sheets fixed to mild steel purlins (m/s) with J-hook bolts (m/s) in:</u>				
J	Roof Covering	440	Sm		
K	Standard ridge piece	37	Lm		
	<u>18 Gauge plain sheet welded to mild steel framing (m/s)</u>				
L	Side and Gable Cladding fixed to structural steel members (m/s)	48	Sm		
M	Fascia and Verge members 300 mm high	98	Lm		
	<u>Prepare and apply one undercoat and three coats of first quality Emulsion paint to the following surfaces</u>				
N	Rendered surfaces externally	26	Sm		
Total Carried to Collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Prepare and apply one zinc plumbate primer and three coats approved super gloss oil paint externally on :-</u>				
A	General metal surfaces girth over 300mm	96	Sm		
B	Metal surfaces girth over 300mm but not exceeding 400mm	60	Lm		
C	Metal surfaces girth over 200mm but not exceeding 300mm	367	Lm		
D	Ditto. Girth over 100mm but not exceeding 200mm	680	Lm		
	<u>Approved uPVC rainwater goods complete with all accessories:</u>				
E	160mm diameter gutter with socketed joints in the running length fixed steel purlins with and including brackets at 900mm	74	Lm		
F	Extra over ditto gutter for 90° Corners/ Stopped ends	4	No		
G	Ditto; 100mm diameter rain water outlet connector	8	No		
H	75mm diameter rainwater downpipe fixed with and including mild steel straps at 900mm centres, welded to steel columns	32	Lm		
I	Extra over ditto downpipe for elbow/bend	8	No		
J	Ditto; Outlet connector	8	No		
	<u>Filling and Paving Works</u>				
K	150mm thick Imported murram fill well spread, watered and compacted to levels to 95% MDD T99 at optimum moisture content to receive precast concrete slabs (m.s) paving	367	Sm		
L	50mm thick quarry dust blinding to surfaces of hardcore to receive precast concrete paving slabs (m.s)	367	Sm		
M	Approved anti-termite insecticide treatment applied to the tops of quarry dust blinding	367	Sm		
	<u>Precast concrete standard paving slabs (grey); class 20 (20mm) including all necessary formwork, fair finished on exposed surface</u>				
N	600 x 600 x 50mm thick, laid to falls on blinded hardcore (m/s) surface; jointing and pointing in cement and sand (1:3) mortar	367	Sm		
O	125 x 250mm Precast concrete (class 20) kerb with once chamfered edge laid on and including 450 x 100mm plain concrete (1:3:6) foundation haunched up on one side including all necessary excavations formwork etc.	94	Lm		
Total Carried to Collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>MARKET SHED - ELECTRICAL WORKS</u>				
	<u>Supply, install, test and commission the following</u>				
A	Lighting point wired in 3×1.5 mm ² single core PVC cables drawn in 20mm heavy gauge conduits concealed in walls and floors or on roof members, 1-way switched but excluding the light fitting itself.	6	No		
B	2'gang 2way switch as in T&J or any other approved equivalent.	4	No		
C	LED flood lights 50watts for compound lighting	6	No		
D	Standard steel control pillar for metering and other accessories	1	No		
E	Sub-mains circuit 3x10mm ² singles core PVC CU cable	8	Lm		
F	4-way sp consumer unit as in Hager or approved equivalent comprising of	1	No		
	i)10A MCB's	4	No		
	ii)100A double pole main switch(incomer)	1	No		
G	2.5mm ² 3CORE PVC .S.W.A PVC underground cable from meter box to metallic loop-in box.	15	Lm		
H	Trenching, laying, Tilling and backfilling work.	15	Lm		
I	Allow for testing and commissioning of Electrical Installations				
J	Allow Kenya Shillings Fifty Thousand Only for Electricity Connection Charges				50,000.00
	<i>Total Carried to Collection</i>				
	<u>COLLECTION</u>				
1	Brought Forward From Page TAC/CS/1				
2	Brought Forward From Page TAC/CS/2				
3	Brought Forward From Page TAC/CS/3				
4	Brought Forward From Page Above				
	TOTAL FOR 1 NO. 36 M LONG MARKET SHEDS CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>SECTION 5: 1 NO. ECO - TOILET BLOCK</u>				
	<u>ELEMENT NO. 1: SUBSTRUCTURES (ALL PROVISIONAL)</u>				
A	Clear site of all existing structures; dispose arisings as directed <u>Excavations</u>	45	Sm		
B	Oversite to remove top soil average 150mm deep and keep on site for later re-use for landscaping	45	Sm		
C	Oversite to reduce levels commencing from stripped level average 300 mm deep.	-	Cm		
D	Excavate strip foundation trench starting from stripped level not exceeding 1.50 meters deep.	32	Cm		
E	Extra-over all excavation for excavating any class of rock	6	Cm		
F	Return, fill-in and rum selected excavated materials around foundations	21	Cm		
G	Load, wheel and cart away surplus excavated materials and <u>Fillings and Anti termite treatment</u>	11	Cm		
I	Hardcore filling in making up levels average 300mm thick in layers of 150mm maximum thickness	33	Sm		
J	50mm thick quarry dust blinding to surfaces of hardcore	33	Sm		
K	Premise 200 SC' or other equal and approved anti-termite insecticide treatment applied strictly in accordance with manufacturer's instructions, to tops of fill and foundation walls	38	Sm		
	<u>50mm thick mass concrete mix 1:4:8; to bottoms of:</u>				
L	Strip foundation <u>Insitu concrete; reinforced; class 20/20; mix 1:2:4; vibrated</u>	21	Sm		
M	Strip foundation	4	Cm		
N	150 mm thick bed	38	Sm		
P	250mm (average) wide x 250 mm deep trapezium shaped thickening and hand packing hardcore to two sloping sides	8	Lm		
	<i>Total carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including</u>				
A	8mm diameter bars	54	Kg		
B	10mm ditto	73	Kg		
	<u>Mesh Fabric; B.S. 4483</u>				
C	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per	38	Sm		
	<u>Sawn formwork as described to:-</u>				
D	Edge of ground slab 75-150mm high	28	Lm		
	<u>Substructures walling</u>				
E	200 mm thick approved local natural stone walling; roughly squared; bedding and jointing in cement sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoop iron in every alternate course.	44	Sm		
	<u>Damp proofing:</u>				
F	500 gauge, 200mm weltd laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	38	Sm		
	<u>Plinth finishes</u>				
G	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	13	Sm		
H	Prepare and apply three coats of black bituminous paint on wood floated rendered plinth surfaces.	13	Sm		
	<u>Precast concrete standard paving slabs; class 20 (20mm)</u>				
J	600 x 600 x 50mm thick, laid to falls on blinded hardcore (m/s) surface; jointing and pointing in cement and sand (1:3) mortar	19	Sm		
K	125 x 250mm Precast concrete (class 20) kerb with once chamfered edge laid on and including 450 x 100mm plain concrete (1:3:6) foundation haunched up on one side including all necessary excavations formwork etc.	33	Sm		
	<i>Total carried to collection</i>				
	COLLECTION				
1	Brought forward from page TAC/TB/1				
2	Brought down from page above				
	TOTAL FOR SUBSTRUCTURES CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 2: SUPERSTRUCTURE FRAME</u>				
	<u>REINFORCED CONCRETE FRAME</u>				
	<u>In situ concrete; reinforced; class 20/20; mix 1:2:4; vibrated</u>				
A	Beams and Ring beam	3	Cm		
B	150mm thick Suspended Slab	6	Sm		
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including</u>				
C	12mm diameter bars	376	Kg		
D	8mm ditto	160	Kg		
	<u>Sawn formwork as described to:-</u>				
E	Sides and soffites of beams	35	Sm		
F	Edges and soffites of suspended slab	7	Sm		
	<u>WALLING</u>				
	<u>2-ply bituminous felt damp-proof courses, under walls:</u>				
G	200mm wide	14	Lm		
H	150mm wide	28	Lm		
	<u>Walling in fine chisel dressed stone obtained from an approved quarry, bedded and jointed in gauged cement:sand (1:3); and reinforced with 25mm wide x 3mm thick hoop iron strips at every alternate course in:</u>				
I	200mm thick External and Gable walls	56	Sm		
J	150mm thick Parapet walls	9	Sm		
K	150mm thick Internal walls	27	Sm		
L	Labour and materials for eaves filling 200mm thick walls average 200mm high to the profile of roof covering sheets	18	Lm		
M	Raking cutting 200mm thick wall and filling as described above	18	Lm		
	TOTAL FOR SUPERSTRUCTURE FRAME CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 3: ROOFING</u>				
	<u>The following in 9No. Roof trusses with nailed or bolted connections including hoisting and fixing in position not exceeding 3.60 metres above ground floor level</u>				
	<u>(All timber in sawn celcured second grade cypress or other equal and approved)</u>				
A	150 x 50mm rafters	37	Lm		
B	150 x 50mm tie joist	36	Lm		
C	150 x 50mm king posts	4	Lm		
D	100 x 50mm struts and ties	36	Lm		
E	100 x 50mm wall plate fixed with and including 200mm long 12mm diameter rag bolts cast into beam at 750mm centers	10	Lm		
F	75 x 50mm purlins	43	Lm		
	<u>In wrot cypress</u>				
G	250 x 25mm thick facsia/verge boards; nailed	20	Lm		
	<u>Prepainted, Gauge 28 Corrugated Roofing sheets</u>				
H	Roof covering; 150mm laps on one end and one and a half corrugation side lap; nailed to timber purlins (m.s)	42	Sm		
I	Half round standard ridge/hip cover to match	6	Lm		
	<u>28Gauged galvanised steel sheet shaped as required</u>				
J	300mm girth twice bent flashing with one chased and grouted to wall in cement and sand mortar	9	Lm		
K	600mm wide valley gutter	-	Lm		
	<u>Knot, prime and stop; prepare and apply one undercoat and two coats of gloss oil paint on:</u>				
L	Timber Surfaces girth 200 - 300mm	20	Sm		
TOTAL FOR ROOFING CARRIED TO SECTION SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 4: DOORS</u>				
	<u>Metal doors</u>				
	<u>Purpose made mild steel casement door; 50x50x6mm RHS framing plugged to concrete or masonry all round; anchored with 100mm long fishtailed 25 x 25 x 2mm thick angle section at 300mm centres; single swing door leaf comprising of 50 x 45 x 3mm RHS stiles, bottom, top and middle rails; bottom panel infilled with 3mm thick metal sheet welded to framed sections on one side; top panel glazed (m.s); complete with hinges, padlock bolt and receiver, burglar grilles on glazed panels; all welds ground smooth; one coat red oxide primer before delivery to site;</u>				
A	Metal Door Size 900x 2100mm high; glazed (m.s)	3	No		
	<u>Wrot Cypress door frames and finishings</u>				
B	150 x 50 mm; plugged door lining	6	Lm		
C	100 x 50 mm; 2 No. labours; plugged door frame	20	Lm		
D	50 x 35mm moulded architrave	20	Lm		
E	25mm moulded quadrants	20	Lm		
	<u>50mm. thick semi solid cored flush door faced both sides ordinary 3mm plywood and hardwood lipping all round in:-</u>				
F	Door size 830 x 2060mm high	5	No		
G	Door Size 930 x 2060mm high (overall) double leaf (equal) double swing door	1	No		
	<u>Supply and fix the following iron mongery to UNION</u>				
H	Pressed steel butt Double action spring hinges	7.5	Prs		
I	100mm pressed steel butt hinges	7.5	Prs		
J	2 Lever mortice lock complete with lever furniture	3	No		
K	200mm long Stainless steel Padlock bolt, receiver and Padlock	5	No		
L	150mm long Aluminium Barrel bolt	5	No		
M	Rubber door stop with rawl bolt fixed to floor	10	No		
N	Stainless steel Coat/ Hat hook	6	No		
O	Male/Female/ PWD Toilet Signs (Plastic)	3	No		
	<i>Total carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Sundries</u>				
A	25 x 6mm Galvanised mild steel door fixing cramp 225mm long with one end built into walling and other end bent, holed and screwed to door frame	60	No		
	<u>Glazing: 4mm thick clear sheet glass to</u>				
B	Metal with putty; ditto	1	Sm		
	<u>Aluminium wood primer before fixing: -</u>				
C	Backs of frame over 100mm but not exceeding 200mm girth	20	Lm		
	<u>Prepare and apply one coat etching primer, one undercoat and two coats first quality gloss oil paint on:</u>				
E	General surfaces of glazed casement metal doors	12	Sm		
	<u>Knot, prime and stop; prepare and apply one undercoat and two coats of gloss oil paint on:</u>				
F	General surfaces of timber doors (both sides measured)	24	Sm		
G	Surfaces; over 100mm but not exceeding 200mm girth; internal	20	Lm		
H	Ditto not exceeding 100mm girth; internal	40	Lm		
	<i>Total carried to collection</i>				
	<u>COLLECTION</u>				
1	Brought forward from page TAC/TB/5				
2	Brought down from page above				
	TOTAL FOR DOORS CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 5: WINDOWS</u>				
	<u>Precast concrete class 20 fair faced all exposed surfaces bedded and jointed cement and sand (1:3) mortar</u>				
A	275 x 50mm thick once rebated and throated window cill <u>Supply and fix the following purpose made small pane steel casement windows fabricated from approved mild steel sections (min. 2.5 mm thick); window comprising of 75mm high perforated permanent vent and hood at the top and infilled with mosquito gauze wire; approved pattern 10mm solid bars burglar proofing grille; metal fixing lugs and fixing into masonry/concrete; all neccessary fasteners, closers and hinges; prime all metal surfaces with red oxide primer before delivery to site:-</u>	10	Lm		
B	Window size 1500 x 900mm high	2	No		
C	Window size 600 x 900mm high	1	No		
D	Window size 1800 x 750mm high	1	No		
E	Window size 900 x 600mm high	1	No		
F	Window size 600 x 600mm high <u>Glazing; fixed to metal casement with putty</u>	5	No		
G	4 mm Thick clear sheet glass panes not exceeding 0.10 sm	5	Sm		
H	Ditto but obscured panes; ditto <u>Prepare and apply one coat etching primer, one undercoat and two coats first quality gloss oil paint on:</u>	2	Sm		
I	General metal surfaces	14	Sm		
TOTAL FOR WINDOWS CARRIED TO SECTION SUMMARY					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 6: FINISHES</u>				
	<u>Floor finishes</u>				
	<u>Mass Concrete mix 1:3:6 in:</u>				
A	2000mm long x 300mm wide x 150mm thick Urinal Plinth complete with sawn formwork to the edges.	1	No		
	<u>30 mm thick cement and sand (1:4) screed backing to</u>				
B	Concrete floor beds and slabs to receive floor tiles (m.s)	44	Sm		
	<u>Floor tiles fixed to cement: sand (1:4) screed bed with</u>				
C	12 mm thick ceramic; coloured; non-slip; semi - gloss finish	44	Sm		
D	100mm high skirting tile fixed as described before to wall	69	Lm		
	<u>Wall finishes</u>				
E	Extra over horizontal and vertical pointing in 10mm thick rod in cement and sand (1:3) mortar; one coat of bituminous paint.	56	Sm		
	<u>Plaster; 15mm thick, two coat work, cement:sand (1:3)</u> <u>12mm first coat; 3mm cement:lime (1:9) putty second coat</u> <u>steel trowelled to concrete /masonry base generally to:</u>				
F	Walls, beams and columns; internal	70	Sm		
	<u>Render; 15mm thick one coat cement :sand (1:3); wood</u> <u>floated to concrete or blockwork base generally to: -</u>				
G	Wall, Beams, Parapet walls; external	19	Sm		
H	14mm thick backing to receive ceramic wall tiles	40	Sm		
	<u>Approved ceramic wall tiles to B.S. 1281; coloured; fixed in</u> <u>an approved pattern; bedding and jointing in cement sand</u> <u>(1:4) mortar, grout with coloured cement to match</u>				
I	6mm thick; butt joints straight both ways; to cement sand base (m/s) to walls internal	40	Sm		
J	Extra over ditto rounded on one edge	69	Lm		
	<i>Total carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Ceiling finishes</u>				
	<u>Plaster; 15mm thick, two coat work, cement:sand (1:3) 12mm first coat; 3mm cement:lime (1:9) putty second coat steel trowelled to concrete /masonry base generally to:</u>				
A	Soffits of suspended slab and beams; internal	6	Sm		
	<u>Sawn celcured cypress; well selected</u>				
B	75 x 50mm Main branderling	60	Lm		
C	50 x 50mm Secondary branderling	160	Lm		
	<u>Chipboard ceiling lining</u>				
D	12mm Thick approved Chipboard in ceiling lining set out in symmetrical panels with V-joints on timber branderling (m.s) at 600 centers; nails punched and puttied	38	Sm		
	<u>Wrot cypress; well treated and seasoned</u>				
E	100 x 25 mm moulded cypress cornice	57	Lm		
	<u>Painting and Decorations</u>				
	<u>Prepare and apply one undercoat and three coats of first quality emulsion paint to the following surfaces to:</u>				
F	Plastered walls internally	70	Sm		
G	Plastered Ceiling internally	6	Sm		
H	Rendered surfaces externally	19	Sm		
I	Chipboard ceiling lining surfaces	38	Sm		
J	Moulded cornice surfaces not exceeding 100mm girth	57	Lm		
	<i>Total carried to collection</i>				
	<u>COLLECTION</u>				
1	Brought forward from page TAC/TB/8				
2	Brought down from page above				
	TOTAL FOR FINISHES CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 7: BUILDING FIXTURES</u>				
	<u>1No. Concrete worktops size 3000 x 600 x 900mm high</u>				
A	100mm thick concrete 1:3:6 in plinth	2	Sm		
B	100mm thick vibrated reinforced concrete mix (1:2:4) in suspended worktop slab	2	Sm		
C	Sawn formwork to soffites of ditto	2	Sm		
D	Ditto to edges of worktop 75-150mm high	3	Lm		
E	Ditto to edges of plinth	3	Lm		
F	100mm thick natural stone walling in cement:sand (1:4) mortar.	2	Sm		
G	12mm thick plaster on ditto	4	Sm		
H	Ditto to soffites of worktop	2	Sm		
J	12mm cement and sand screed (1:3) trowelled smooth to plinth	2	Sm		
K	Ditto to top of worktop to receive tiling finish	2	Sm		
L	10mm thick ceramic non slip floor tiles on top of slab	2	Sm		
	TOTAL FOR BUILDING FIXTURES CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<p><u>ELEMENT NO. 8: MECHANICAL WORKS</u></p> <p><u>SANITARY FITTINGS</u></p> <p><u>Supply, deliver, install, test and commission the following sanitary appliances complete with all the accessories including all connections to the services, waste, jointing to water supply overflows, supports and all plugging and screwing to walls and floors.</u></p> <p><u>Note:</u></p> <p><u>(i) All sanitary fittings shall be in approved colour.</u></p> <p><u>(ii) The Model and Ref No. indicated is only a guide to the type and quality of fittings.</u></p> <p><u>(iii) Equivalent and Approved models may be acceptable.</u></p> <p><u>Squatting Water Closet</u></p> <p>A Squatting water closet suite in white vitreous china comprising of wc bowl with top plate and integral foot threads, S trap connector, 9 litres high cistern and fittings and pull chain including siphon, 15mm diameter side inlet ball valve, 20mm diameter side overflow, plastic flush pipe, inlet connector and cistern supports. All to be as Twyford Oriental or approved equivalent.</p> <p><u>Wash Hand basin (WHB)</u></p> <p>B Wash hand basin size 406 x 305mm with one tap holes and chain stay hole, 32mm diameter chrome plated pop up chain waste, concealed wall brackets, chrome plated single tap hole basin mixer as Cobra and chrome plated bottle trap (32mm 'P' trap) with 75mm seal. The wash hand basin to be as Twyford's 'Sola 510' or equal and approved.</p> <p><u>Urinal Slab</u></p> <p>C 2400 x 1200mm high Stainlesssteel Urinal slab complete for four persons chrome plated flush pipes, 7.5 litres ceramic automatic cistern, 40mm heavy duty plastic bottle trap and 40mm diameter chrome plated outlet with grating firmly fixed on the wall with chrome plated screws. The fittings shall be as Twyford's or equal and approved.</p> <p><u>Toilet Roll Holder</u></p> <p>D Toilet roll holder in vitreous china in white colour of size 165 X 165mm and recessed into wall. Toilet roll holder to be as "Twyford's semi recessed and ornamental"</p> <p><u>Mirrors</u></p> <p>E 6mm thick polished glass size 610 x 497mm, silverbacked mirror with bevelled edges, plugged and screwed to wall with 4No chrome plated chrome packed screws and 5mm thick foam back rest.</p>	5	No		
		4	No		
		1	No		
		6	No		
		4	No		
	Total Carried Forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought Forward				
	<u>Soap Dispenser</u>				
A	Wall mounted soap dispenser with a capacity of about one litre having a press action soap release mechanism complete with fixing screws. Allow for initial soap supply. As Starmix or approved equivalent.	2	No		
	<u>Towel Rail</u>				
B	Chrome plated 20mm diameter x 800mm long approved towel rail and brackets as one piece, plugged and screwed into the wall. The fitting shall be as Twyford's or equal and approved.	2	No		
	<u>Flexible Tubing</u>				
C	15mm diameter x 300mm long flexible connectors complete with integral chrome plated angle valve for connecting the sanitary fitting to water supply. To be as Cobra or equal and approved.	11	No		
	<u>Robe hook</u>				
D	Robe hook in Satin Aluminium to be mounted by concealed screws to wall wedges. To be as Twyford's Spectrum 2000 accessories or equal and approved.	5	No		
	<u>WATER STORAGE TANK</u>				
E	Supply, deliver and install a PVC Water storage tank of capacity 1,000 litres. The tank should be complete with cover, ball float valve, inlet and outlet connections and overflow connection. The tank should be as " KENTANK" or approved equivalent. Allow for hoisting, placing and positioning the tank on raised platform (m.s) 2.7m above existing ground level	1	No		
F	25mm diameter ppr pipe	20	Lm		
G	25mm diameter elbow	4	No		
H	25 x 20mm diameter reducer	1	No		
I	25mm diameter union	2	No		
J	25mm diameter nipple	5	No		
K	25mm diameter gate valve as pegler	2	No		
L	25mm diameter plain socket	4	No		
	Total Carried Forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought Forward				
	<u>INTERNAL PLUMBING</u> <u>Supply, deliver and install pipes, tubing and fittings as described and shown on the drawings. The pipes shall be PN 25 PPR pipes where exposed to adverse weather condition and all conforming to the current European standards for PPR installations and to the Engineers approval, pipe jointing shall be by polyfusion or use of electric coupling. Rates must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures, valves, sockets, sliding and fixed joints, support raceways, isolating sheaths, elastic materials, expansion arms and bends, crossovers, couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures.</u> <u>Pipes</u>				
A	25mm ppr pipe	35	Lm		
B	32mm diameter pipe	15	Lm		
	<u>Extra over pipe work for</u>				
C	32 x 25mm diameter reducing tee	1	No		
D	20mm diameter Tee	10	No		
E	20mm diameter union	10	No		
F	20mm diameter nipple	11	No		
G	20mm diameter elbow	8	No		
H	25 x 20mm diameter reducer	11	N0		
I	20mm diameter plain socket	10	No		
J	15mm diameter female socket	10	No		
	<u>Taps and Valves</u>				
K	20mm diameter pillar tap as pegler complete with stand pipe	1	No		
L	15mm diameter angle valve	11	No		
M	20mm diameter gate valve as pegler	1	No		
N	25mm diameter gate valve as pegler	1	No		
	Total Carried Forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought Forward				
	<u>INTERNAL FOUL WATER DRAINAGE</u>				
	<u>Supply, deliver and install the following UPVC, MUPVC, soil and waste systems respectively to B.S 5255 with fittings fixed to Manufactures Printed instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system.</u>				
	<u>UPVC soil and Waste systems c/w fittings</u>				
A	100mm diameter heavy duty brown pipe class 'D'	20	Lm		
B	100mm diameter heavy duty grey pipe class 'D'	6	Lm		
C	50mm diameter ditto	18	Lm		
D	40mm diameter ditto	5	Lm		
	<u>Extra over UPVC pipe for the following</u>				
E	100mm diameter long radius bend	6	No		
F	100mm diameter inspection bend	6	No		
G	100mm diameter vent cowl	1	No		
H	100mm weathering apron	1	No		
I	100 x 50mm diameter floor trap and grating - 4-way	3	No		
J	100mm diameter gulley trap	2	No		
K	100mm diameter single branch	2	No		
L	100mm diameter access cap	2	No		
K	50mm diameter sweep tee	4	No		
L	50mm diameter access cap	4	No		
M	40mm diameter sweep Tee	3	No		
N	40mm diameter access cap	3	No		
	Total Carried Forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought Forward				
	<u>DISABLED TOILET FACILITY</u>				
A	A completely assembled unit of wheel chair accessible WC/WHB disabled toilet combination facility comprising: (i) A close coupled white in colour WC bowl with horizontal outlet complete with 7.5L cistern complete with fittings and additional cover clip for additional security. 100mm high Avalon seat ring with chrome plated metal hinges. (ii) Wall mounted wash hand basin with one L/Hand or R/Hand offset tap hole and chain stay hole, wall brackets, lever action chrome plated 15mm diameter tap, chrome plated chain waste 32mm, (iii) 4No. 600mm diameter long rails. (iv) 1No. Hinged support rail and back support rail. All in nylon coated alluminium. (v) Mirror 400 x 900mm high fixed 900mm above the floor. The whole facility to conform in all aspects to the requirements To be as Twyford's AVALON - D.O.C.M pack or equal and approved.	1	Set		
B	Allow for testing and commissioning of the plumbing and drainage system to the satisfaction of the Engineer.		Item		
C	Allow for builders work in relation to plumbing and drainage works		Item		
	TOTAL FOR MECHANICAL WORKS CARRIED TO SECTION SUMMARY				
	<u>ELEMENT NO. 9: BIO DIGESTER AND INSPECTION CHAMBERS</u>				
	<u>The following in 1 No. Inspection Chamber internal size 600 x 450 x 600 mm average depth.</u>				
A	Clear site of all existing structures; dispose arisings as directed	2	Sm		
B	Excavate pit for Inspection chamber starting from ground level and not exceeding 1.5 metres deep.	2	Cm		
C	Return, fill in and ram selected excavated materials from site.	1	Cm		
D	Load, cart away and dispose extra excavation materials to sites approved by the local authorities and as directed.	1	Cm		
	<u>Concrete (1:4:8 to 40 mm gauge) as described in :-</u>				
E	50 mm blinding under manhole bottom slab	0.3	Sm		
	Total Carried forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought forward				
	<u>Concrete (1:3:6) as described in :-</u>				
A	150mm thick benching size 600x450mm with 15mm thick waterproof cement:sand (1:2) rendering steel trowelled smooth including forming 150mm half round channels 800mm long.	1	No		
	<u>Insitu concrete; reinforced; class 20/20); mix 1:2:4; vibrated</u>				
B	100 mm thick manhole bottom slab	0.3	Sm		
C	150 mm thick suspended Manholes cover slab	0.3	Sm		
	<u>Sawn formwork as described to :-</u>				
D	Soffites of suspended slab.	0.3	Sm		
E	Edge of bed 75 to 150 mm high	2	Lm		
F	Edge of Suspended slab ditto	2	Lm		
G	Extra over for boxing for rebate of manhole frame and cover	1	No		
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including</u>				
H	10 mm diameter	5	Kg		
	<u>Medium dressed approved natural quarry stone walling in cement and sand (1:3) mortar as described :-</u>				
J	200 mm walling reinforced as described	5	Sm		
	<u>Sulphate resistant water proof cement and sand (1:4) render internally to walls steel trowelled smooth</u>				
K	12 mm thick waterproofed cement and sand (1:2) render to walls steel trowelled hard and smooth internally.	4	Sm		
	<u>Manhole cover :-</u>				
L	600 x 450 mm approved medium duty manhole cover and frame and bedding frame in cement and sand (1:2) and setting frame in grease.	1	No		
	Total Carried forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought forward				
	<u>Labour and material</u>				
A	Building in ends of 100mm diameter pipes to manholes	1	No		
B	Ditto, 150 mm diameter ditto	2	No		
	<u>Prepare and apply one undercoat and two finishing coats</u>				
C	To Cast iron manhole coversand Framing (bsm)	1	Sm		
	TOTAL FOR 1 NO. INSPECTION CHAMBER				x 4
	TOTAL FOR 4NO. INSPECTION CHAMBERS CARRIED FORWARD				
A	<u>3000 Litres Bio Digester Septic Tank System</u> Kenya Shillings Four Hundred Thousand (Kshs.400,000.00) only for the construction and Installation of a Bio-Digester waste treatment system complete from the first manhole (m/s) to testing and commissioning by a Nema approved Specialist to the satisfaction of the PM.			Sum	
	TOTAL FOR BIODIGESTER SYSTEM CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>TOGONYE</u> <u>SECTION 5: 1 NO. ECO - TOILET BLOCK</u> <u>BILL SUMMARY</u>				
NO.	ELEMENT	PAGE			AMOUNT-KSHS
1	SUBSTRUCTURES	TAC/TB/2			
2	SUPERSTRUCTURE FRAME	TAC/TB/3			
3	ROOF	TAC/TB/4			
4	DOORS	TAC/TB/6			
5	WINDOWS	TAC/TB/7			
6	FINISHES	TAC/TB/9			
7	BUILDING FIXTURES	TAC/TB/10			
8	MECHANICAL WORKS	TAC/TB/15			
9	BIO DIGESTER AND 4 NO. INSPECTION CHAMBERS	TAC/TB/17			
10	ALLOW FOR ELECTRICAL WORKS	ITEM			
	TOTAL FOR 1 NO. ECO TOILET BLOCK CARRIED TO BILL SUMMARY				50,000.00

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>SECTION 6: PO OFFICE SIZE 9.4 X 3.0 X 2.7M HIGH</u>				
	<u>ELEMENT NO. 1: SUBSTRUCTURES (ALL PROVISIONAL)</u>				
A	Clear site of all existing structures; dispose arisings as directed	57	Sm		
	<u>Excavations</u>				
B	Oversite to remove top soil average 150mm deep and keep on site for later re-use for landscaping	57	Sm		
C	Excavate strip foundation trench starting from stripped level not exceeding 1.50 meters deep.	26	Cm		
D	Extra-over all excavations for excavating any class of rock	1	Cm		
E	Return, fill-in and rum selected excavated materials around foundations	14	Cm		
F	Load, wheel and cart away surplus excavated materials and deposit in approved dumping area on site	12	Cm		
	<u>Fillings and Anti termite treatment</u>				
G	Hardcore filling in making up levels average 300mm thick in layers of 150mm maximum thickness	23	Sm		
H	50mm thick quarry dust blinding to surfaces of hardcore	23	Sm		
I	Premise 200 SC' or other equal and approved anti-termite treatment applied strictly in accordance with manufacturer's instructions, on top of fill blinding and foundation walls	28	Sm		
	<u>50mm thick mass concrete mix 1:4:8; to bottoms of:</u>				
J	Strip foundation	17	Sm		
	<u>Insitu concrete; reinforced; class 20/20); mix 1:2:4; vibrated</u>				
K	Strip foundation	4	Cm		
L	100 mm thick bed	28	Sm		
	<i>Total carried to collection</i>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including bends, hooks, tying wire and spacer blocks:</u>				
A	10 mm diameter bars	40	Kg		
B	8 mm ditto	151	Kg		
	<u>Mesh fabric reinforcement to B.S 4483 and setting in concrete with 300 mm side and end laps (measured nett-allow for laps) allow for tying wire and spacer blocks</u>				
C	Reference A142 mesh 200 x 200 mm , weight 2.22Kg/Sm	28	Sm		
	<u>Sawn formwork as described to:-</u>				
D	Sides of Strip foundations	17	Sm		
E	Edge of ground slab 75-150mm high	25	Lm		
	<u>Damp proofing;</u>				
F	500 gauge, 200mm weltd laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	28	Sm		
	<u>Foundation Walling</u>				
G	200 mm thick approved local natural stone walling; roughly squared; bedding and jointing in cement sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoop iron in every alternate course.	44	Sm		
	<u>Plinth finishes and External paving</u>				
H	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	15	Sm		
I	Prepare and apply three coats of black bituminous paint on wood floated rendered plinth surfaces.	15	Sm		
	<i>Total carried to collection</i>				
	<u>COLLECTION</u>				
1	Brought forward from page TAC/PO/1				
2	Brought down from above				
	TOTAL FOR SUBSTRUCTURES CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 2: SUPERSTRUCTURE FRAME</u>				
	<u>REINFORCED CONCRETE WORKS</u>				
	<u>In situ concrete; reinforced; class 20/20; mix 1:2:4; vibrated</u>				
A	Ringbeam	2.0	Cm		
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including bends, hooks, tying wire and spacer blocks:</u>				
B	12mm diameter bars	130	Kg		
C	8mm ditto	36	Kg		
	<u>Sawn formwork as described to:-</u>				
D	Vertical sides and soffits of beams	24	Sm		
	<u>WALLS</u>				
	<u>2-ply bituminous felt damp-proof courses, under walls:</u>				
E	200mm wide	30	Lm		
	<u>Walling in fine chisel dressed stone obtained from an approved quarry, bedded and jointed in cement:sand (1:3) mortar; and reinforced with 25mm wide x 3mm thick hoop iron strips at every alternate course in:</u>				
F	200mm thick; External walls	58	Sm		
G	Ditto in Gables walls and walling above ringbeam	6	Sm		
H	200mm thick; Internal walls	13	Sm		
I	Labour and materials for eaves filling 200mm thick walls average 200mm high to the profile of roof covering sheets	18	Lm		
J	Raking cutting 200mm thick wall and filling as described above	14	Lm		
	TOTAL FOR SUPERSTRUCTURE FRAME CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 3: ROOF</u>				
	<u>The following in 5No. Roof trusses with nailed or bolted connections including hoisting and fixing in position not exceeding 3.0 metres above ground floor level</u>				
	<u>(All carpentry timber to be sawn celcured second grade cypress or other equal and approved timber well seasoned to an equilibrium moisture content of between 9% and 15%)</u>				
A	100 x 50mm Kingposts, Struts and Ties	40	Lm		
B	150 x 50mm rafters and tie joist	40	Lm		
C	100 x 50mm wall plate fixed with and including 200mm long 12mm diameter rag bolts cast into beam at 750mm centers	18	Lm		
D	75 x 50mm purlins	60	Lm		
E	200 x 25mm thick wrot cypress fascia / Verge boards; nailed	30	Lm		
	<u>Prepainted, Gauge 28 Corrugated Roofing sheets</u>				
F	Roof covering; 150mm laps on one end and one and a half corrugation side lap; nailed to timber purlins (m.s)	48	Sm		
G	Standard ridge/hip cover to match	10	Lm		
	<u>Approved uPVC rainwater goods complete with all accessories:</u>				
H	180mm diameter gutter with socketed joints in the running length fixed steel purlins with and including brackets at 1000mm centers	18	Lm		
I	Extra over ditto gutter for 90° Corners/ Stopped ends	2	No		
J	Ditto; 180 X 110mm diameter rain water outlet connector	2	No		
K	110mm diameter rainwater downpipe fixed with and including mild steel straps at 1000mm centres, fixed to masonry	8	Lm		
L	Extra over ditto downpipe for elbow/bend	2	No		
M	Ditto; Outlet connector	2	No		
	<u>Prepare and apply one coat etching primer, one undercoat and two coats first quality gloss oil paint on:</u>				
N	Timber surfaces girth 200 - 300mm	30	Lm		
	TOTAL FOR ROOF CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 4: DOORS</u> <u>Purpose made mild steel casement door comprising of 40x40x5mm Angle framing plugged to concrete or masonry all round and anchored with 200mm long fishtailed 25x25x2mm thick angle section at 300mm centres; panelled swing door leaf comprising of 30x30x3mm SHS stiles, bottom, top and middle rails; bottom panel infilled with Gauge 16 thick metal sheet welded to framed sections on one side; top panel glazed (m.s); complete with purpose made hinges, padlock bolt and receiver; approved 4 lever steel door lock; approved pattern 10mm solid bars burglar proofing grilles on glazed panels; all welds ground to smooth; prepare and apply one coat red oxide primer before delivery to site in door overall size:</u>				
A	900 x 2400 mm high; Single leaf	3	No		
	<u>Glazing; fixed to metal casement with approved putty</u>				
B	5mm Thick clear sheet glass panes not exceeding 0.10 sm to metal surfaces	3	Sm		
	<u>Knot, prime and stop; prepare and apply one undercoat and two coats of gloss oil paint on:</u>				
C	General surfaces of glazed metal doors (both sides measured)	13	Sm		
	TOTAL FOR DOORS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 5: WINDOWS</u>				
	<u>Precast concrete class 20 fair faced all exposed surfaces bedded and jointed cement and sand (1:3) mortar</u>				
A	275 x 50mm thick once rebated and throated window cill	7	Lm		
	<u>Supply and fix the following purpose made small pane steel casement windows fabricated from approved mild steel sections (min. 2.5 mm thick); window comprising of 75mm high perforated permanent vent and hood at the top and infilled with mosquito gauze wire; approved pattern 10mm solid bars burglar proofing grille; metal fixing lugs and fixing into masonry/concrete; all necessary fasteners, closers and hinges; prime all metal surfaces with red oxide primer before delivery to site:-</u>				
B	Window size 1200 x 1200mm high	5	No		
	<u>4mm thick sheet glass and glazing with putty to metal casement window frames in:</u>				
C	Clear sheet glass; in panes size 0.1 - 0.5 square metre	8	Sm		
	<u>Prepare and apply one coat etching primer, one undercoat and two coats first quality gloss oil paint on:</u>				
D	General surfaces of glazed metal windows (bsm)	16	Sm		
E	Ditto. Burglarproofing grilles: (ditto)	16	Sm		
	<u>Curtain rods</u>				
F	Supply and fix wrought iron curtain rod including the main and sheer rods together with ends, dividers, brackets and rings	8	Lm		
	TOTAL FOR WINDOWS CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 6: FINISHES</u>				
	<u>Floor finishes</u>				
	<u>Cement and sand (1:4) screed as described on concrete floor beds and slabs:-</u>				
A	32mm thick bed to receive ceramic floor tiles (m.s) finish	24	Sm		
	<u>Approved coloured ceramic floor tiles bedded on screed bed (m.s) with approved adhesive and jointed with coloured grout to match</u>				
B	10mm thick semi gloss finished tiles; non slip	24	Sm		
C	100 x 10mm ditto Skirting to match	25	Lm		
	<u>Wall finishes</u>				
D	Extra over horizontal and vertical pointing in 10mm thick rod in cement and sand (1:3) mortar; one coat of bituminous paint.	58	Sm		
	<u>Plaster; 15mm thick, two coat work, cement:sand (1:3) 12mm first coat; 3mm cement:lime (1:9) putty second coat steel trowelled to concrete /masonry base generally to:</u>				
E	Walls, Jambs and Reveals; internally	94	Sm		
	<u>Render; 15mm thick one coat cement :sand (1:3); wood floated to concrete or blockwork base generally to: -</u>				
F	Walls, Jambs, Reveals, Gables and Beams; externally	14	Sm		
	<u>Ceiling finishes</u>				
	<u>Sawn celcured cypress; well selected</u>				
G	75 x 50mm Main brandering	33	Lm		
H	50 x 50mm Secondary brandering	96	Lm		
	<u>Chipboard ceiling lining</u>				
I	12mm Thick approved Chipboard in ceiling lining set out in symmetrical panels with V-joints on timber brandering (m.s) at 600 centers; nails punched and puttied	23	Sm		
	<u>Wrot cypress; well treated and seasoned</u>				
J	100 x 25 mm moulded cypress cornice	33	Lm		
Total carried to collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Painting</u>				
	<u>Prepare and apply one undercoat and three coats of first quality Emulsion paint to the following surfaces</u>				
A	Plastered walls internally	94	Sm		
B	Rendered surfaces externally	14	Sm		
	<u>Prepare and apply three coats of first quality washable distemper on new softboard ceilings and cornices.</u>				
C	Chipboard ceiling lining surfaces	23	Sm		
D	Cornice surfaces girth not exceeding 100mm; internal	33	Lm		
<i>Total carried to collection</i>					
	<u>COLLECTION</u>				
1	Brought forward from page TAC/PO/8				
2	Brought down from above				
	TOTAL FOR FINISHES CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>ELEMENT NO. 7: BUILDING FIXTURES (ALL PROVISIONAL)</u>				
	<u>Low Level Concrete Worktops size 6100 x 450 x 900mm high</u>				
A	100mm thick concrete 1:3:6 in plinth	3	Sm		
B	100mm thick vibrated reinforced concrete mix (1:2:4) in suspended worktop slab	3	Sm		
C	Sawn formwork to soffites of ditto	3	Sm		
D	Ditto to edges of Plinths and worktop 75 - 150mm high	10	Lm		
E	100mm thick natural stone walling bedded and jointed in cement and sand (1:4) mortar.	3	Sm		
F	12mm thick, two coat work, cement:sand (1:3) 12mm first coat; 3mm cement:lime (1:9) putty second coat steel trowelled to masonry wall internally	6	Sm		
G	Ditto to soffites of concrete worktop	3	Sm		
H	25mm thick plain cement and sand screed (1:3) trowelled smooth on top of plinth and worktop	6	Sm		
	<u>Painting</u>				
	<u>Prepare and apply one undercoat and three coats of first quality Emulsion paint to the following surfaces</u>				
I	Plastered walls internally	6	Sm		
	TOTAL FOR BUILDING FIXTURES CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>SECTION 6: PO OFFICE SIZE 9.4 X 3.0 X 2.7M HIGH</u> <u>SUMMARY</u>				
NO.	ELEMENT	PAGE		AMOUNT-KSHS	
1	SUBSTRUCTURES	TAC/PO/2			
2	SUPERSTRUCTURE FRAME	TAC/PO/3			
3	ROOF	TAC/PO/4			
4	DOORS	TAC/PO/6			
5	WINDOWS	TAC/PO/7			
6	FINISHES	TAC/PO/9			
7	BUILDING FIXTURES	TAC/PO/10			
8	ALLOW FOR ELECTRICAL WORKS	ITEM			
TOTAL FOR P.O's OFFICE CARRIED TO BILL SUMMARY				50,000.00	

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>BILL NO. 7: FENCING AND GATES (ALL PROVISIONAL)</u>				
1	<u>GATES</u>				
	<u>Metal Gates in standard mild steel sections</u>				
A	Supply and fix approved double leafed mild steel gate overall size 6000 x 2200mm (average) high; each leaf 2500mm long and comprising of 40x40x2mm SHS frame all round and 2 no. midrails; infilled with and including 30x30x2mm SHS verticals spaced at 150mm centres; complete with all necessary purpose made hinges and locking bolts; allow for supply, mortising and hanging into position 2no. 2700 mm high x 75x75x6mm SHS gate columns cast 600mm deep in mass concrete mix (1:3:6) surround including excavation of pits sizes 300mm diameter x 500mm deep; prime to all metal surfaces before delivery to site	1	No		
B	Ditto. 2000x 1800mm high Pedestrian gate ditto	3	No		
	<u>Prepare and apply one undercoat and two finishing gloss oil paint to:</u>				
C	General metal surfaces	48	Sm		
D	Ditto. Girth over 100mm but not exceeding 200mm	22	Lm		
2	<u>CHAIN LINK FENCE</u>				
E	Supply and fix 14 gauge (heavy duty) galvanized chainlink fence 2.4 metres high complete with and including 5 strands of 12.5 gauge barbed wire all to be as "Ngombe" or equal and approved fastened on and including 100x125mm cranked precast concrete posts at 3000mm centres. Posts to have matching support struts/strainer posts at 30metre centres and at all bends. Including embedding posts/morticed in 450x450x600mm mass concrete (1:3:6) surround with all necessary excavations, formwork and disposal.	100	Lm		
	TOTAL FOR FENCING AND GATES CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>SECTION 8: HIGH LEVEL WATER STORAGE TANK</u>				
1	<u>WATER TANK STAND SIZE 2 X 2 X 3M HIGH</u>				
	<u>SUBSTRUCTURES (ALL PROVISIONAL)</u>				
A	Clear site of all existing structures; dispose arisings as directed	10	Sm		
	<u>Excavations</u>				
B	Oversite to remove top soil average 150mm deep and keep on site for later re-use for landscaping	10	Sm		
C	Excavate pits for column bases starting from stripped level not exceeding 1.50 meters deep.	6	Cm		
D	Extra-over all excavations for excavating any class of rock	1	Cm		
E	Return, fill-in and rum selected excavated materials around foundations	1	Cm		
F	Load, wheel and cart away surplus excavated materials and deposit in approved dumping area on site	5	Cm		
	<u>50mm thick mass concrete mix 1:4:8; to bottoms of:</u>				
J	Column bases	4	Sm		
	<u>Insitu concrete; reinforced; class 20/20); mix 1:2:4; vibrated</u>				
K	Column bases	2	Cm		
L	Columns Size 300 x 300 x 1400mm high	1	Cm		
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including bends, hooks, tying wire and spacer blocks:</u>				
A	12 mm diameter bars	69	Kg		
B	8 mm ditto	14	Kg		
	Total Carried Forward				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought Forward				
	<u>Sawn formwork as described to:-</u>				
A	Sides of Column Bases	6	Sm		
B	Sides of Columns	7	Sm		
C	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	2	Sm		
	<u>STRUCTURAL STEEL FRAMEWORK</u>				
	<u>Mild steel frame works, all welds/ connections to be well spotted and grounded smooth.</u>				
D	100 x 100 x 6mm SHS; 3000mm high Columns; one end welded to and including 200 x 200 x 3mm base plate with 4 x 18mm diameter holes	215	Kg		
E	50 x 50 x 3mm HR Angles Rails and Bracings	178	Kg		
F	75 x 50 x 4mm SHS Bearers	299	Kg		
G	6mm thick MS Plate welded to bearers (m/s)	4	Sm		
H	300 x 300 x 8mm thick base plate complete with 4 x 18mm diameter holes to receive 16mm diameter bolts (m.s) bedded on concrete and grouted with cement:sand (1:3) mortar	4	No		
	<u>Prepare and apply one coat etching primer, one undercoat and two coats first quality gloss oil paint on:</u>				
I	General metal surfaces (bsm)	8	Sm		
J	Metal surfaces girth 200 to 300mm girth	128	Lm		
K	Ditto girth 300 to 400mm girth	12	Lm		
	TOTAL FOR WATER TANK STAND CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
2	<u>MECHANICAL WORKS</u>				
	<u>HIGH LEVEL WATER STORAGE TANK</u>				
A	Supply, deliver and install a PVC Water storage tank of capacity 5,000 litres. The tank should be complete with cover, ball float valve, inlet and outlet connections and overflow connection. The tank should be as " KENTANK" or approved equivalent.Allow for hoisting, placing and positioning the tank on raised platform (m.s) 3.0m above existing ground level	1	No		
B	25mm diamer ppr pipe	70	Lm		
C	25mm diameter elbow	6	No		
D	25 x 20mm diameter reducer	1	No		
E	25mm diameter union	2	No		
F	25mm diameter nipple	5	No		
G	25mm diameter gate valve as pegler	2	No		
H	25mm diameter plain socket	8	No		
J	Allow for excavation of trench for laying the supply pipe 60m long size 400 x 600mm deep, after laying the pipe backfill the soil and ram well	60	Lm		
	TOTAL FOR MECHANICAL WORKS CARRIED TO SECTION SUMMARY				
	<u>SECTION 8: HIGH LEVEL WATER STORAGE TANK</u> <u>SUMMARY</u>				
NO.	ELEMENT	PAGE		AMOUNT-KSHS	
1	WATER TANK STAND SIZE 2 X 2 X 3M HIGH	TAC/HLT/2			
2	MECHANICAL WORKS	TAC/HLT/3			
	TOTAL FOR HIGH LEVEL WATER STORAGE TANK CARRIED TO BILL SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>				
	<u>SECTION 9: LOW LEVEL WATER TANK AND BASE</u>				
	<u>Excavations, Disposal, Fillings and and Anti termite treatment</u>				
A	Excavate strip foundation not exceeding 1.50m deep	13	Cm		
B	Return, fill-in and rum selected excavated materials around foundations	11	Cm		
C	Load, wheel and cart away surplus excavated materials and deposit in approved dumping area on site	2	Cm		
D	Allow for keeping excavations free from all water by all means		Item		
E	Allow for plunking and strutting to sides of excavations and keeping excavations free from any fallen material		Item		
F	Hardcore filling in making up levels in layers not exceeding 150mm thick	4	Cm		
G	50mm thick quarry dust blinding to surfaces of hardcore	9	Sm		
H	Premise 200 SC' or other equal and approved anti-termite treatment applied strictly in accordance with manufacturer's instructions, on top of fill blinding and foundation walls	9	Sm		
	<u>Damp proofing;</u>				
I	500 gauge, 200mm weltd laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	9	Sm		
	<u>Foundation Walling</u>				
J	200 mm thick approved local natural stone walling; roughly squared; bedding and jointing in cement sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoop iron in every alternate course.	21	Sm		
	<u>Concrete Bliding</u>				
K	50mm thick plain concrete mix 1:4:8 to foundations bottoms	9	Sm		
	<u>Insitu concrete; reinforced; class 20/20); mix 1:2:4; vibrated</u>				
E	Strip Foundation - 200mm thick	2	Cm		
F	Ground Beam - 200 x 300mm high	1	Cm		
G	150mm thick Surface Bed	9	Sm		
	<u>Total to Collection</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including bends, hooks, tying wire and spacer blocks:</u>				
A	12mm diameter bars	58	Kg		
B	10mm ditto	33	Kg		
C	8mm ditto	50	Kg		
	<u>Mesh fabric reinforcement to B.S 4483 and setting in concrete with 300 mm side and end laps (measured nett-allow for laps) allow for tying wire and spacer blocks</u>				
D	Reference A142 mesh 200 x 200 mm , weight 2.22Kg/Sm	9	Sm		
	<u>Sawn formwork as described to:-</u>				
E	Sides of Strip Foundation	6	Sm		
F	Sides of Ground Beams	9	Sm		
G	Edges of Surface bed not exceeding 150mm high	10	Lm		
	<u>Render: 15mm thick one coat cement :sand (1:3); wood floated to concrete or blockwork base generally to: -</u>				
H	Columns; Externally to fairface quality	6	Sm		
	<u>Prepare and apply one undercoat and three coats of first quality Emulsion paint to the following surfaces</u>				
I	Rendered surfaces externally	6	Sm		
	<u>10,000 Litres Water UPVC Water Storage Tank; Supply and Install</u>				
J	Supply, deliver and install a PVC Water storage tank of capacity 10,000 litres. The tank should be complete with cover, ball float valve, inlet and outlet connections overflow connection and wash out outlet. The tank should have g.m.s stand pipe connected c/w 20mm diameter tap. The tank should be as " ROTO TANK" or approved equivalent. The tank should rest on a raised and flat concrete base (measured separately)	1	No		
K	Allow for Testing and Commissioning of rain water harvesting system			Item	
	<i>Total to Collection</i>				
	<u>COLLECTION</u>				
	Brought Forward From Page TAC/LLT/1				
	Brought Forward From Page Above				
	TOTAL FOR 10,000L WATER TANK AND BASE CARRIED TO GRAND SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE				
	SECTION 10: FABRICATED WASTE SKIP BINS AND BASES				
9.1	2 NO. 8CM GARBAGE WASTE SKIP BINS				
A	<p><u>Supply, Deliver, test and commission 8CM Fabricated Metal Garbage/ Refuse Waste Skip Loader Container/ Bin Size 4000x 1800 x 1500mm high all to in compliance with the following specifications</u></p> <p>A standard production, skip loader container/ bin 8m³, of latest design, in current production, marketed in Kenya</p> <p>Designed to export specification, capable of operating in tropical conditions.</p> <p>Suitable for storing, transport and discharge of garbage/refuse</p> <p>Skip container to be compatible with the 14-16 ton, Truck to ensure correct interfacing and safe use - Mandatory</p> <p>Suitable for loading/unloading by hydraulically operated lifting boom of a skip loader tractor operated</p> <p>Any items not included in this specification but which are deemed necessary for efficient or improved operation of the equipment shall be fitted.</p> <p>Skip container frame, body plates and all fittings such as hinges, locking devices to be fully welded and all upper edges to be re-inforced with channel or rolled hollow sections.</p> <p>Door locks are strong enough to keep the door(s) of a loaded container closed. They should withstand the forces exerted on them by the material in the container due to any movement during loading and travelling.</p> <p>Fitted with suitable lifting points, locking devices and tipping bars, covers etc</p> <p>Suitably painted to eliminate/ prevent corrosion and rust</p> <p>Specification of warranty to be submitted when tendering. Each bin to carry manufacturer's statement of minimum 1 year warranty - Mandatory</p> <p>Names and locations of dealers/agents where back-up service can be obtained</p> <p>Repair manual to be supplied - One per each Bin - Mandatory</p> <p>Parts catalogue supplied - One per each Bin - Mandatory</p>	2	No		
	TOTAL FOR 2 NO. WASTE SKIP BINS CARRIED TO SECTION SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
9.2	<u>2 NO. GARBAGE WASTE SKIP BINS BASES</u>				
	<u>ELEMENT NO. 1:SUBSTRUCTURES (ALL PROVISIONAL)</u>				
A	Clear site of all existing structures; dispose arisings as directed	20	Sm		
B	Excavate oversite to remove top soil average 150mm deep and keep on site for later re-use for landscaping	20	Sm		
C	Excavate to reduce levels commencing from stripped level average 300 mm deep.	6	Cm		
D	Excavate strip foundation trench starting from stripped level not exceeding 1.50 meters deep.	9	Cm		
E	Extra-over all excavation for excavating any class of rock	2	Cm		
F	Return, fill-in and rum selected excavated materials around foundations	4	Cm		
G	Load, wheel and cart away surplus excavated materials and deposit in approved dumping area on site	11	Cm		
	<u>Fillings; Anti termite treatment and Damp Proofing</u>				
H	Hardcore filling in making up levels average 300mm thick in layers of 150mm maximum thickness	5	Cm		
I	50mm thick quarry dust blinding to surfaces of hardcore	6	Sm		
J	Premise 200 SC' or other equal and approved anti-termite insecticide treatment applied strictly in accordance with manufacturer's instructions, to tops of fill and foundation walls	6	Sm		
K	500 gauge, 200mm weltd laps (no allowance made to laps), horizontal; 1 no. layer laid on compacted quarry dust blinding	6	Sm		
	<u>Insitu concrete; reinforced; class 20/20); mix 1:2:4; vibrated</u>				
L	Strip foundation	2	Cm		
M	200 mm thick bed	6	Sm		
	<u>Sawn formwork as described to:-</u>				
N	Edge of ground slab 75-150mm high	10	Lm		
	<u>40 mm thick cement and sand (1:3) screed, beds, etc:-</u>				
O	40mm tamped screed with approved hardener	6	Sm		
Total carried to Forward					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	Total Brought to Forward				
	<u>Reinforcement: Bars; high yield steel to B.S. 4461 including bends, hooks, tying wire and distance blocks:</u>				
A	12mm diameter bars	44	Kg		
B	10mm ditto	67	Kg		
	<u>Mesh Fabric; B.S. 4483</u>				
C	Reference A142 mesh 200 x 200 mm , weight 2.22 kgs per square meter (measured net - no allowance made for laps) including bends, tying wire and distance blocks	12	Sm		
	<u>Substructures walling</u>				
E	200 mm thick approved local natural stone walling; roughly squared; bedding and jointing in cement sand (1:3) mortar and reinforced with and including 20swg x 1mm wide hoop iron straps in every alternate course.	22	Sm		
	<u>Plinth finishes</u>				
F	14mm thick 2 No. coatwork cement sand (1:3) render; wood floated to concrete or blockwork base to walls; external	12	Sm		
G	Prepare and apply three coats of black bituminous paint on wood floated rendered plinth surfaces.	12	Sm		
	<u>Precast concrete standard paving slabs; class 20 (20mm)</u>				
H	600 x 600 x 50mm thick, laid to falls on blinded hardcore (m/s) surface; jointing and pointing in cement and sand (1:3) mortar	9	Sm		
I	125 x 250mm Precast concrete (class 20) kerb with once chamfered edge laid on and including 450 x 100mm plain concrete (1:3:6) foundation haunched up on one side including all necessary excavations formwork etc.	15	Sm		
	TOTAL FOR 1 NO. WASTE SKIP PLATFORM				X 2
	TOTAL FOR 3 NO. WASTE SKIP BASES CARRIED TO SECTION SUMMARY				
	<u>SECTION SUMMARY</u>				
9.1	2 NO. 8CM GARBAGE WASTE SKIP BINS				
9.2	2 NO. GARBAGE WASTE SKIP BINS BASES				
	TOTAL FOR 2 NO. WASTE SKIP BINS AND BASES CARRIED TO BILL SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
	PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE				
	<u>SECTION 11: 20M HIGH FLOODLIGHT MAST</u>				
1.00	<u>Supply, install, test and commission the following items: with make being as described, (Where make is indicated) or the approved equivalent:-</u>				
1.01	20M high mast steel lighting column made as described in technical specifications	1	No.		
1.02	Luminaire carriage assembly for mounting 6No. 400Watts floodlight fittings	1	No.		
1.03	Enclosed black techno polymer floodlight with polycarbonate visor/photocell, Integral control gear and asymmetrical reflector for 400W HITDE/LED lamp. Sealed to IP65 as THORN SONPAK 7 or equal and approved.	6	No.		
1.04	Wiring from lighting fitting to the cut-out fuses in 4.0 sq-mm copper PVC 4-core Flex.	25	Lm		
1.05	40A HRC fuse, fuse holder and neutral block and all other necessary accessories	1	No.		
1.06	Standard manually operated portable mechanical winch for lowering and raising the light carriage as described in technical specifications.	1	No.		
1.07	Column base foundation works as described and to Structural Engineer's details and approval		Item		
1.08	Standard steel control pillar as described for metering and other equipment including locks.	1	No.		
1.09	<u>Install the following in the control pillar:-</u>				
	a) 100A 4-way consumers unit as approved	1	No.		
	b) For item a) above:-				
	I. 10A MCB	3	No.		
	II. Blanking plate	1	No.		
	c) 240V, 63A double-pole contactor as Telemecanique	1	No.		
1.10	20A photocell as Thorn QPK or approved equivalent mounted on a 4 metres high,(above ground) 75mm diameter steel shaft as will be directed.	1	No.		
	Total carried to collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT-KSHS
1.11	Standard size Pilot lamp mounted on bracket atop luminaire carriage assembly as Thorn series.	1	No.		
1.12	600mm long pure copper air termination with spikes mounted atop the mast as Furse	1	No.		
	<u>EARTHING</u>				
1.13	Earth inspection concrete chamber 300x300x300mm with air tight inspection cover to approval.	1	No.		
1.14	16mm nominal diameter by 1500mm threaded copper earth rod as Furse P NO310 driven to ground.	1	No.		
1.15	6.0mm ² single core earth lead copper cable c/w appropriate cable lugs.	10	Lm		
1.16	Allow for testing and commissioning of the 20m high mast floodlight		Item		
1.17	Allow Kenya Shillings Seventy Thousand Only for Electricity Connection Charges		Item		70,000.00
	<i>Total carried to collection</i>				
	<u>COLLECTION</u>				
1	Brought forward from page TAC/FL/1				
2	Brought down from page above				
	TOTAL FOR 20M HIGH FLOODLIGHT CARRIED TO BILL SUMMARY				

ITEM	DESCRIPTION	RATE	AMOUNT-KSHS
	<u>PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE</u>		
	<u>BILL NO. 12: PROVISIONAL SUMS</u>		
	<u>The following Provisional Sums are to be expended only as INSTRUCTED by the PROJECT MANAGER; priced in accordance with the conditions of the contract relevant to this project and measured and valued on completion of the works or deducted in whole if not required.</u>		
	<u>Commerative Plaque</u>		
A	Kenya Shillings Seventy Five Thousand (Kshs.75,000.00) only	SUM	75,000.00
	<u>Market Shades Signage</u>		
B	Kenya Shillings Seventy Five Thousand (Kshs.75,000.00) only	SUM	75,000.00
	<u>NEMA Certification</u>		
C	Kenya Shillings Two Hundred and Fifty Thousand (Kshs.250,000.00) only	SUM	250,000.00
	<u>Contigencies:</u>		
D	Kenya Shillings Eight Hundred Thousand Only (Kshs. 800,000.00) only	SUM	800,000.00
	TOTAL FOR PROVISIONAL SUM CARRIED TO GRAND SUMMARY		1,200,000.00

PROPOSED TOMATOES AGGREGATION CENTRE AT TOGONYE

GRAND SUMMARY

ITEM	DESCRIPTION	PAGE	FOR BIDDER'S USE (KSHS)	FOR OFFICIAL USE (KSHS)
1	PARTICULAR PRELIMINARIES	PP/9		
2	GENERAL PRELIMINARIES	GP/13		
3	CIVIL WORKS	TAC/CW/5		
4	1 NO. MARKET SHADES	TAC/CS/4		
5	1 NO. ECO-TOILET BLOCK	TAC/TB/18		
6	1 NO. PO OFFICE	TAC/PO/10		
7	FENCING AND GATES	TAC/FG/1		
8	HIGH LEVEL WATER STORAGE TANK	TAC/HLT/3		
9	LOW LEVEL TANK AND BASE	TAC/LLT/2		
10	1 NO. 20M HIGH FLOODLIGHT	TAC/FL/2		
11	2 NO. 8CM GARBAGE WASTE SKIP BINS	TAC/WSB/3		
12	PROVISIONAL SUMS	PS/1		
13	SUB TOTAL 1 - <i>(Rates to be inclusive 16% VAT)</i>			
TOTAL CARRIED TO FORM OF TENDER KSHS				

AMOUNT IN WORDS. Kenya Shillings

.....

.....**Cents**

NAME OF TENDERER

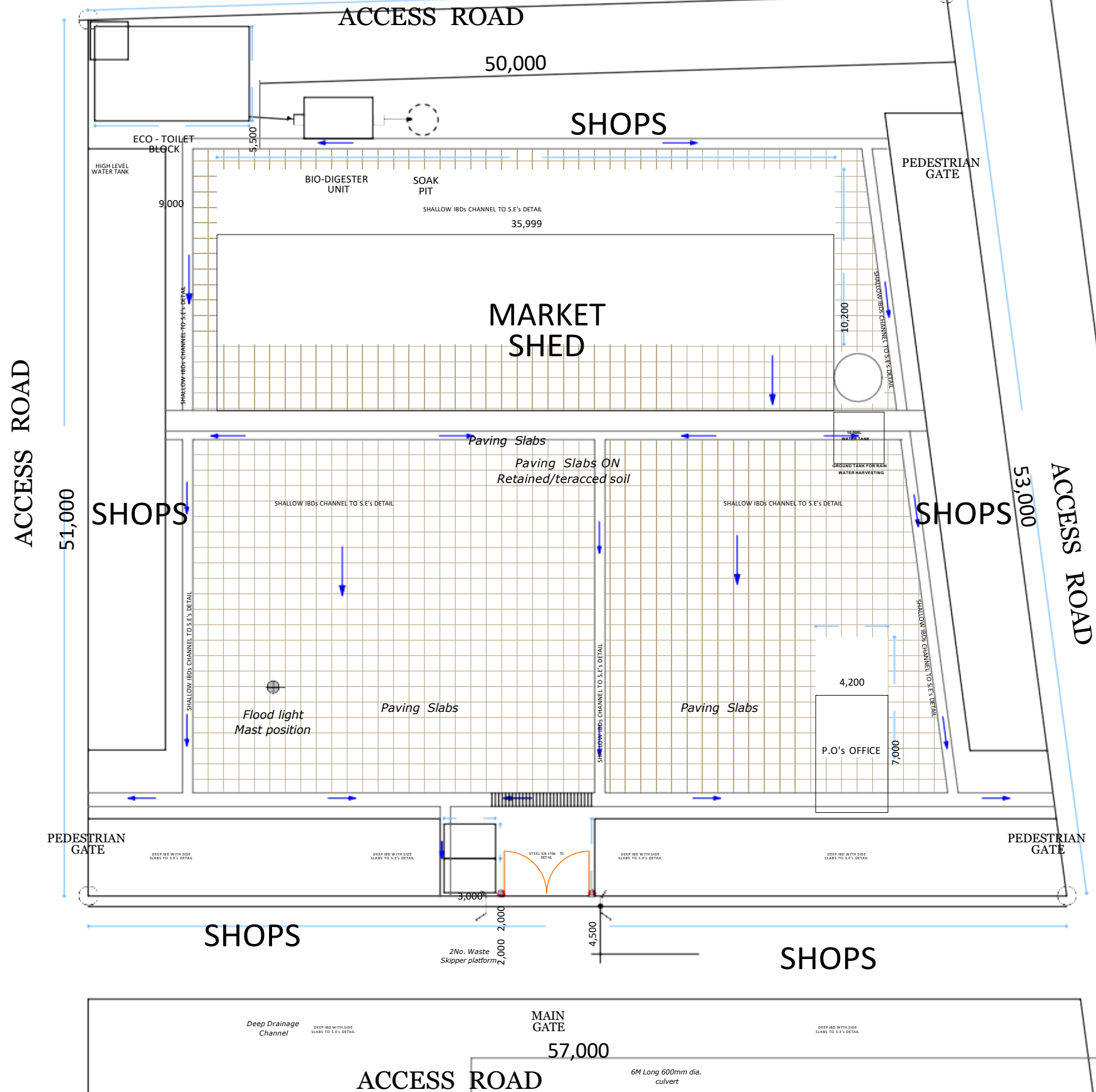
Address

Signature and Date

WITNESS

Address

Signature and Date



NOTES

GENERAL

All dimensions are in mm unless otherwise specified.
Drawing are not to scaled. Only figured dimensions to be used
The contractor must check and verify all dimensions before commencement of any work.

CONSTRUCTION

All slab at ground level to be pouned over 1000 gauge polythene sheet on 50mm thick murrum blinding on hardcore.

All soil under slab around and under foundation to be poisoned for termite control.

All soil on cut embankment to be stablized.The slope not to exceed the natural angle of repose

STRUCTURAL

All black cotton soil to be removed from all buildings and paved

For all R.C work,refer to stuctural Engineer's details.

CIVIL

Depth of foundation to be determined on site to S.E's aproval

All walls less than 150mm thick to be reinforced with hoop iron at every alternate course.

All adjacent R.C. work and masonry walls to be tied with hoop iron at every alternate course.

MECHANICAL

All plumbing and drainage to comply with relevant local authority
SVP denotes soil vent pipe to be provided at the head of the drainage

Drains pass beneath buildings & driveways to be encased in 150mm concrete surround.

The storm drain pipes to comply with BS 556 specification.
All underground foul and waste drain pipes shall be uPVC to comply with BS 5255.

All inspection chambers covers and framing shall be cast iron.

Minimum slope in the drains pipes to be 1 in 100

No chases will be allowed for pipes. Sleeves will be allowed with written approval of structural Eng's. No cutting of concrete without express approval of the Architect or structural Eng.

All testing of pipes must be completed before plastering.
All mechnical works must be co-odinated with electrical and any conflict must be clarified be work begin.

FINISHES

All doors and windows to have permanent ventilations(PV)

All floor finishes to be cement/sand screed unless otherwise instructed

REVISIONS

Project:

~~PROPOSED TOMATO AGGREGATION~~
CENTRE AT TOGONYE

Drawing Title:

SITE LAYOUT:
~~CIVIL WORKS & DRAINAGE~~

Application: CONSTRUCTION

Client:

NARIGP

Project No: Drg No: Sheet 01 of 04

Scales: 1 : 100

Name Signature

Designed by P.M. G.G.Macharia

Drawn H. Karuga 16.07.2022

PROPOSED TOGONYE
TOMATO

AGGREGATION CENTRE SITE LAYOUT PLAN

MINISTRY OF TRANSPORT,
ROADS & PUBLIC WORKS

DIRECTORATE OF PUBLIC
WORKS

(KIRINYAGA COUNTY)

NOTES

I. Chain link fence and Gates

- 1No. 6m wide Vehicular Gate
- 3No. 2m wide Pedestrian Gates
- Chain-link fence - 100 lm

II. Civil Works

- 600x600x50mm Precast Paving slabs - 1,600m²
- 175 x 800mm shallow ID - 180m
- 300 x 450 x 600mm with side slabs on one side - 120m
- 450MM Dia. CULVERT 1 No. - 6m

III. 1 No. Market sheds (36 x 9.8M)

IV. P.O's office & Compound

V. Water Supply

- 5,000L High level water tank & Stand
- 10,000L Low level Water tank & base

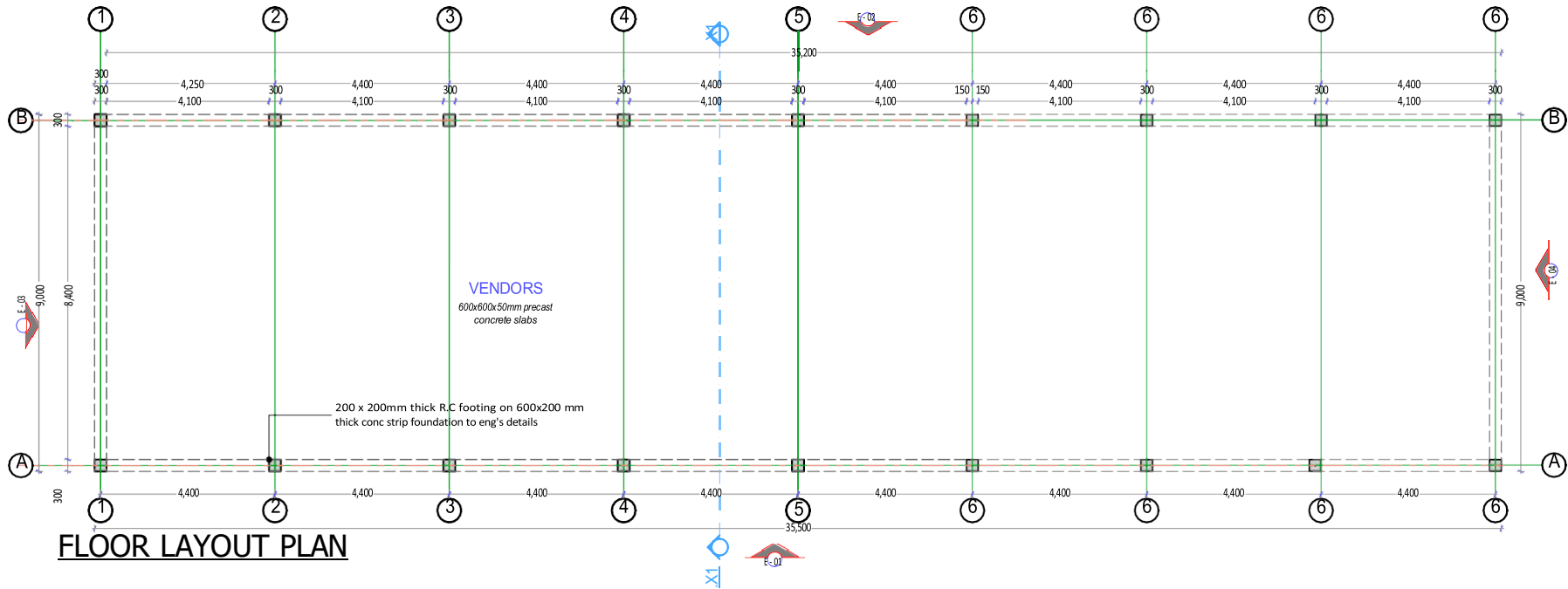
VI. Waste Management

- 2 No. 4.0 x 1.8 x 1.5m fabricated waste skip bins
- 2 No. 3.0 x 2.0m waste skip bins bases/platforms

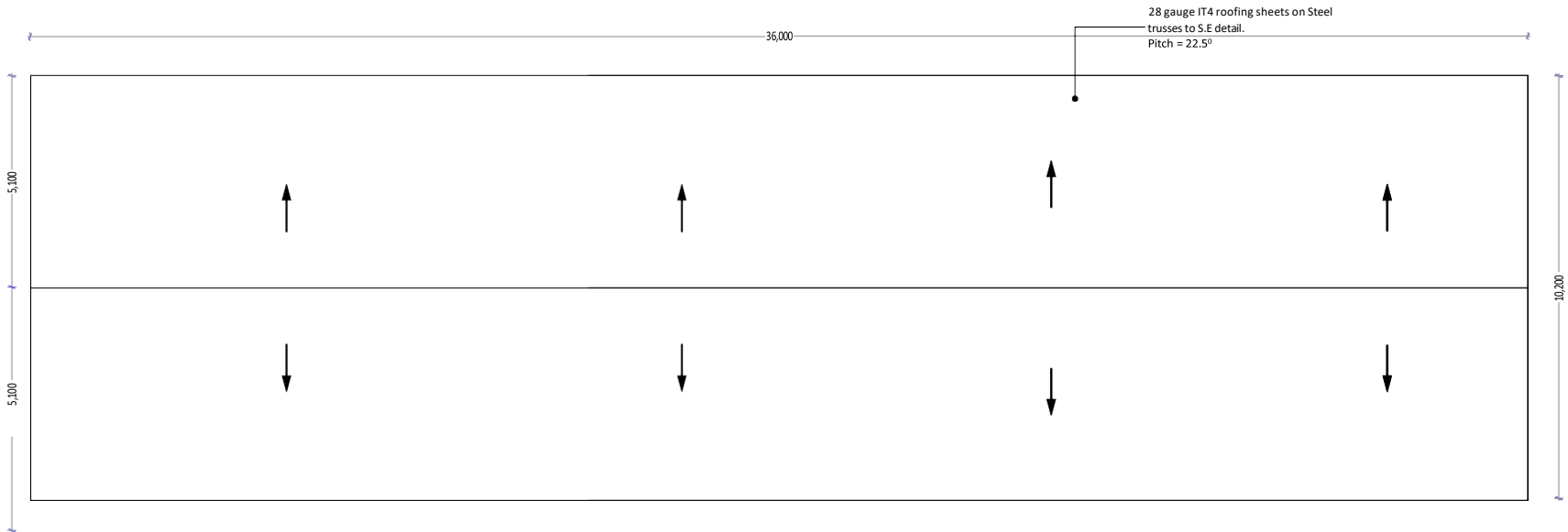
VII. Washrooms

- Eco - Toilet block
- Bio-digester Unit & Soak pit

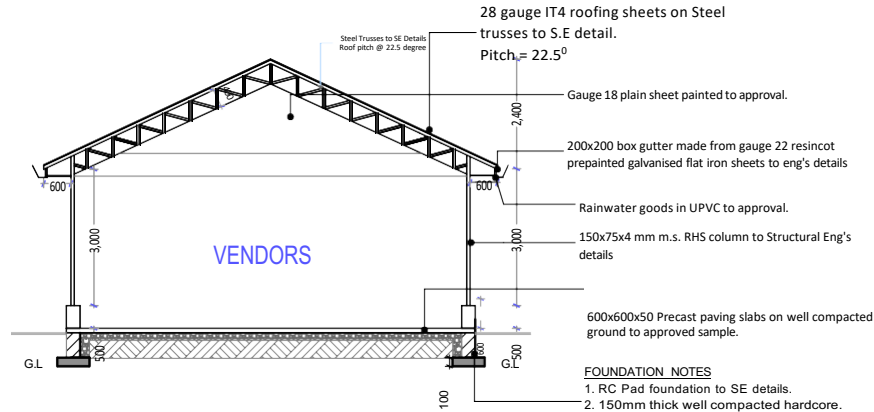
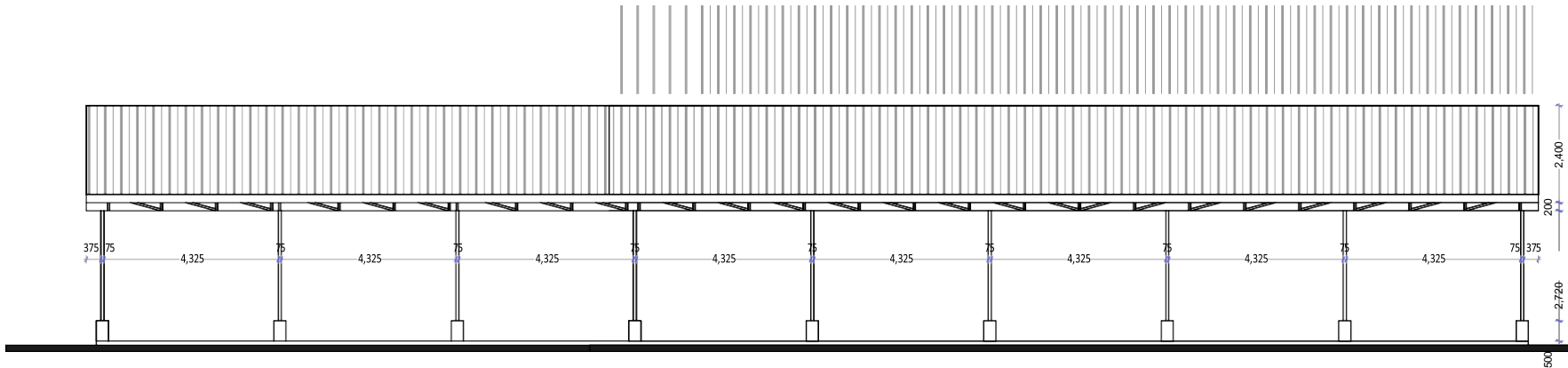
VIII. 20m High Floodlight



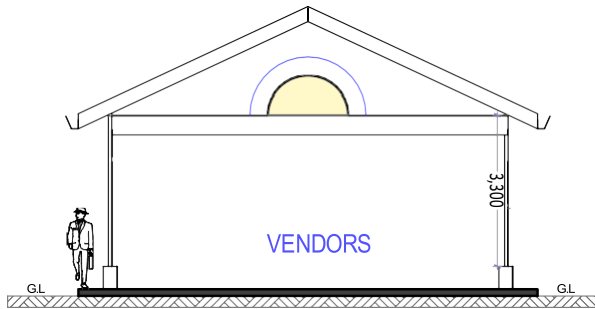
FLOOR LAYOUT PLAN



ROOF PLAN



SECTION X - X



ELEVATION E-03/04

NOTES

GENERAL

All dimensions are in mm unless otherwise specified.
Drawing are not to scaled. Only figured dimensions to be used
The contractor must check and verify all dimensions before commencement of any work.

CONSTRUCTION

All slab at ground level to be poured over 1000 gauge polythene sheet on 50mm thick murrum blinding on hardcore.
All soil under slab around and under foundation to be poisoned for termite control.

All soil on cut embankment to be stabilized. The slope not to exceed the natural angle of repose

STRUCTURAL

All black cotton soil to be removed from all buildings and paved
For all R.C work, refer to structural Engineer's details.

CIVIL

Depth of foundation to be determined on site to S.E's approval
All walls less than 150mm thick to be reinforced with hoop iron at every alternate course.
All adjacent R.C. work and masonry walls to be tied with hoop iron at every alternate course.

MECHANICAL

All plumbing and drainage to comply with relevant local authority
SVP denotes soil vent pipe to be provided at the head of the drainage

Drains pass beneath buildings & driveways to be encased in 150mm concrete surround.

The storm drain pipes to comply with BS 556 specification.
All underground foul and waste drain pipes shall be uPVC to comply with BS 5255.

All inspection chambers covers and framing shall be cast iron.
Minimum slope in the drains pipes to be 1 in 100

No class will be allowed for pipes. Sleeves will be allowed with written approval of structural Eng's. No cutting of concrete without express approval of the Architect or structural Eng.

All testing of pipes must be completed before plastering.
All mechanical works must be co-ordinated with electrical and any conflict must be clarified before work begin.

FINISHES

All doors and windows to have permanent ventilations(PV)
All floor finishes to be cement/sand screed unless otherwise instructed

REVISIONS

Project:

PROPOSED TOMATO AGGREGATION CENTRE AT TOGONYE

Drawing Title:

MARKET SHED DETAILS

Application:

CONSTRUCTION

Client:

NARICP

Project No :

Drg No :

Sheet 02 of 04

Scales:

1 : 100

A

D

B

C

E

F

Designed by

Name

Signature

Date

P.M

G.G.Macharia

16.07.2022

Drawn

H. Karuga

MINISTRY OF TRANSPORT, ROADS & PUBLIC WORKS

DIRECTORATE OF PUBLIC WORKS

(KIRINYAGA COUNTY)

ELEVATION 02

NOTES

GENERAL

All dimensions are in mm unless otherwise specified.
Drawing are not to scaled. Only figured dimensions to be used
The contractor must check and verify all dimensions before commencement of any work.

CONSTRUCTION

All slab at ground level to be poured over 1000 gauge polythene

sheet on 50mm thick murrum blinding on hardcore.

All soil under slab around and under foundation to be poisoned for termite control.

All soil on cut embankment to be stabilized.The slope not to exceed the natural angle of repose

STRUCTURAL

All black cotton soil to be removed from all buildings and paved

For all R.C. work, refer to structural Engineer's details.

CIVIL

Depth of foundation to be determined on site to S.E's approval

All walls less than 150mm thick to be reinforced with hoop iron at every alternate course.

All adjacent R.C. work and masonry walls to be tied with hoop iron at every alternate course.

MECHANICAL

All plumbing and drainage to comply with relevant local authority
SVP denotes soil vent pipe to be provided at the head of the drainage

Drains pass beneath buildings & driveways to be encased in 150mm concrete surround.

The storm drain pipes to comply with BS 556 specification.
All underground foul and waste drain pipes shall be uPVC to comply with BS 5255.

All inspection chambers covers and framing shall be cast iron.
Minimum slope in the drains pipes to be 1 in 100

No class will be allowed for pipes. Sleeves will be allowed with written approval of structural Eng's. No cutting of concrete without express approval of the Architect or structural Eng.

All testing of pipes must be completed before plastering.
All mechanical works must be co-ordinated with electrical and any conflict must be clarified by work begin.

FINISHES

All doors and windows to have permanent ventilations(PV)

All floor finishes to be cement/sand screed unless otherwise instructed

REVISIONS

Project:

PROPOSED TOMATO AGGREGATION
CENTRE AT TOGONYE

Drawing Title:

P.O's OFFICE DRAWINGS, WATER TANKS
DETAILS & WASTE SKIPPER PLATFORM

Application: CONSTRUCTION

Client:

NARIGP

Project No : Drg No. Sheet 03 of 04

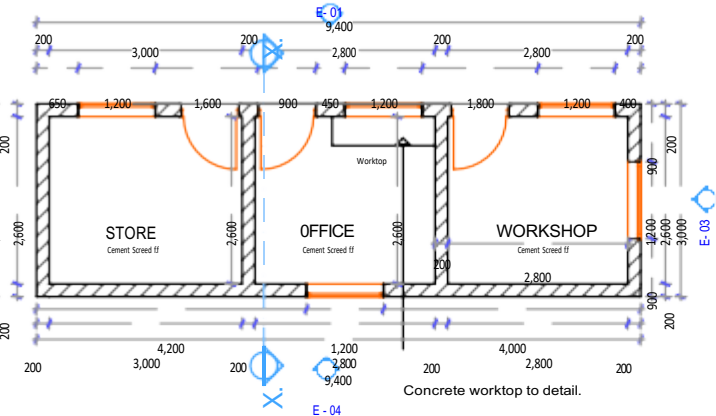
Scales: 1 : 100

Name Signature Date
Designed by G.G.Macharia
P.M Drawn H. Karuga

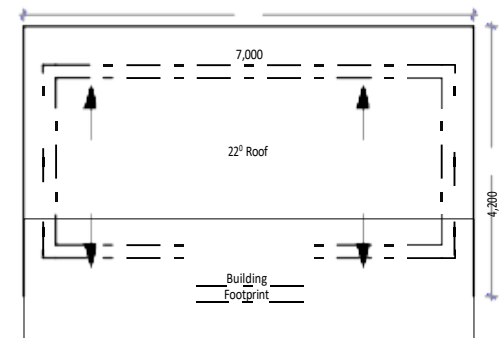
MINISTRY OF TRANSPORT,
ROADS & PUBLIC WORKS

DIRECTORATE OF PUBLIC
WORKS

(KIRINYAGA COUNTY)



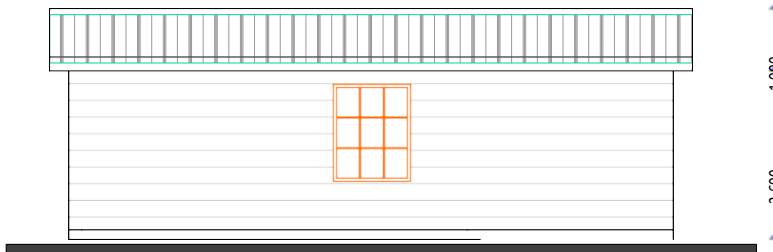
P.O's OFFICE: PLAN
AREA = 28M²



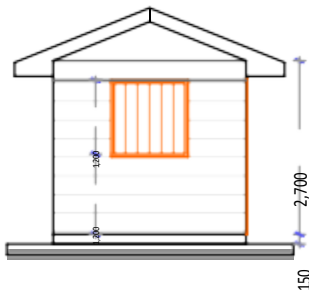
ROOF PLAN



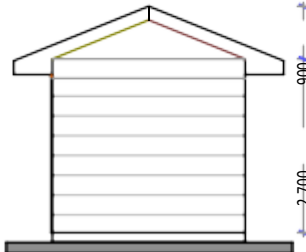
ELEVATION: E - 01



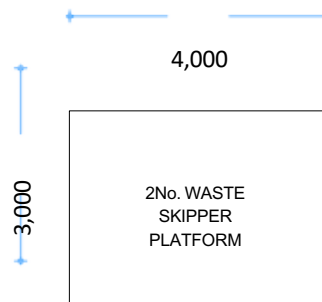
ELEVATION: E - 04



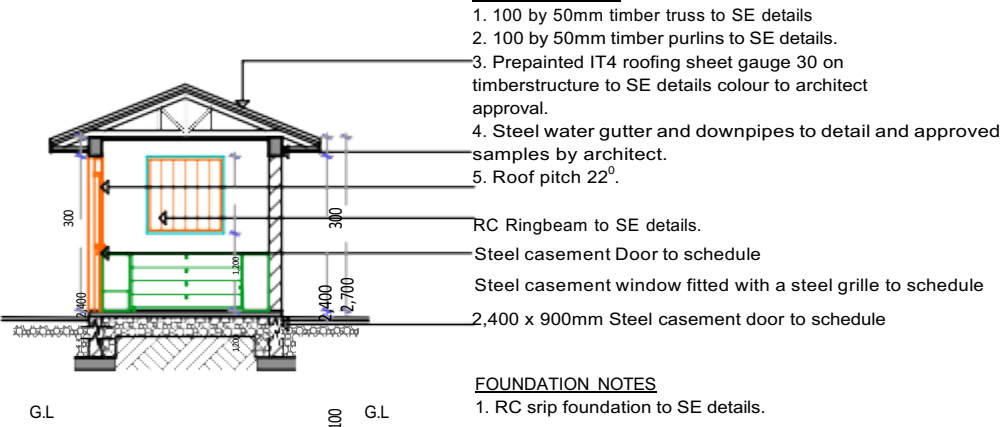
ELEVATION: E - 03



ELEVATION: E - 02



WASTE SKIPPER PLATFORM



SECTION: X - X

ROOFING NOTES

1. 100 by 50mm timber truss to SE details
2. 100 by 50mm timber purlins to SE details.
3. Prepainted IT4 roofing sheet gauge 30 on timberstructure to SE details colour to architect approval.
4. Steel water gutter and downpipes to detail and approved samples by architect.
5. Roof pitch 22°.

RC Ringbeam to SE details.

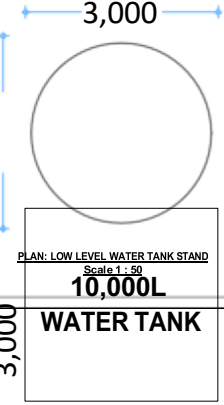
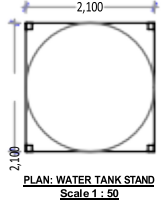
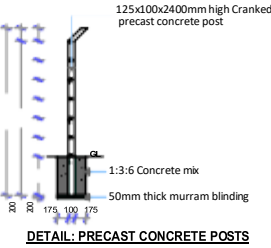
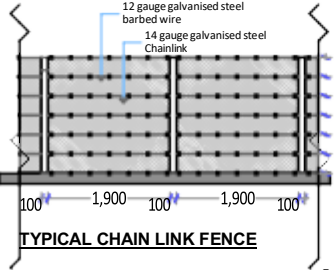
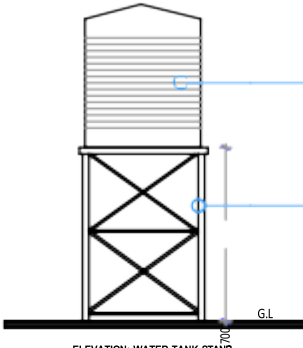
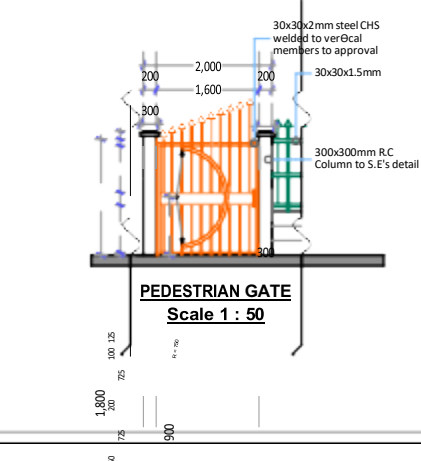
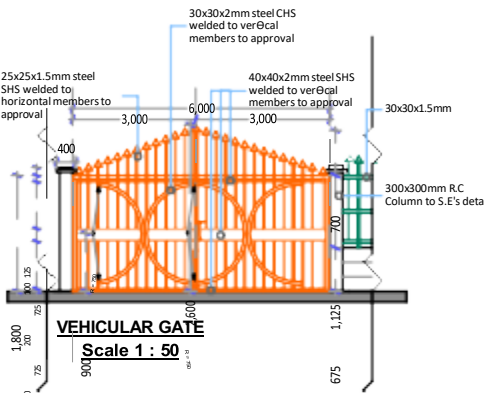
Steel casement Door to schedule

Steel casement window fitted with a steel grille to schedule

2,400 x 900mm Steel casement door to schedule

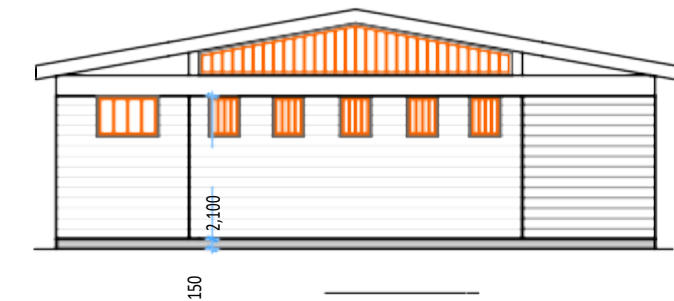
FOUNDATION NOTES

1. RC strip foundation to SE details.
2. 300mm thick well compacted hardcore in 2 layers.
3. 50mm murrum blinding compacted to SE approval.
4. 100g DPM to approval.
5. 150mm RC floor slab SE details.
6. 200mm thick dressed masonry walling in 1:3 mortar to approval.
7. Premise or equally approved antitermite treatment.

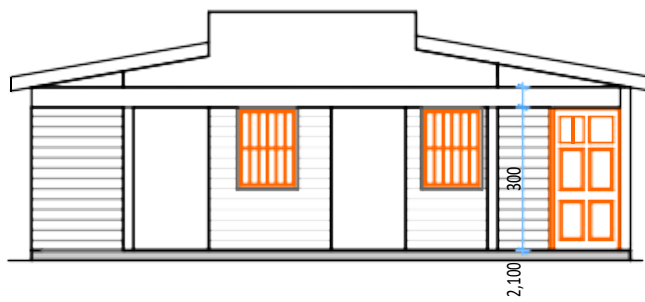


5,000L water tank to approval.

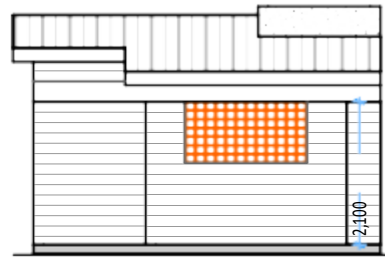
Prefabricated steel stand to S.E's specifications.



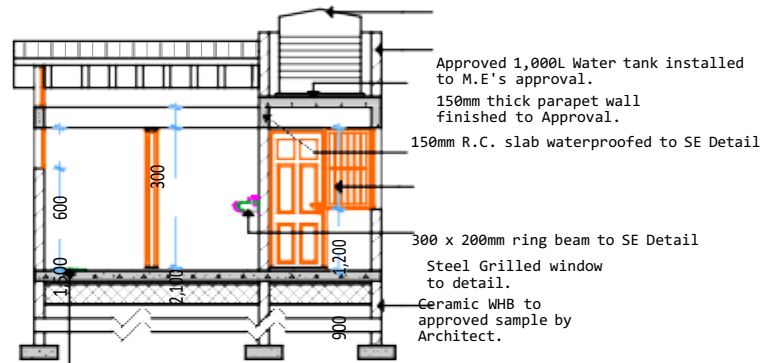
ELEVATION 4
Scale:1:100



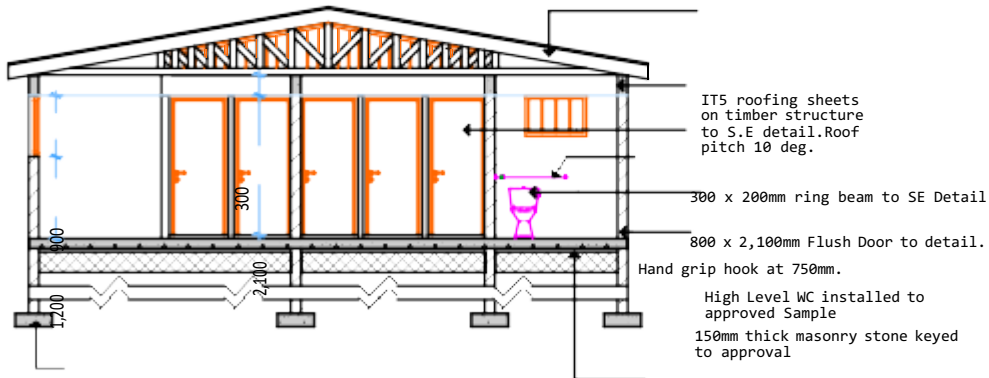
ELEVATION 1
Scale:1:100



ELEVATION 2
Scale:1:100



SECTION K-K
Scale:1:100



SECTION Y-Y
Scale:1:100

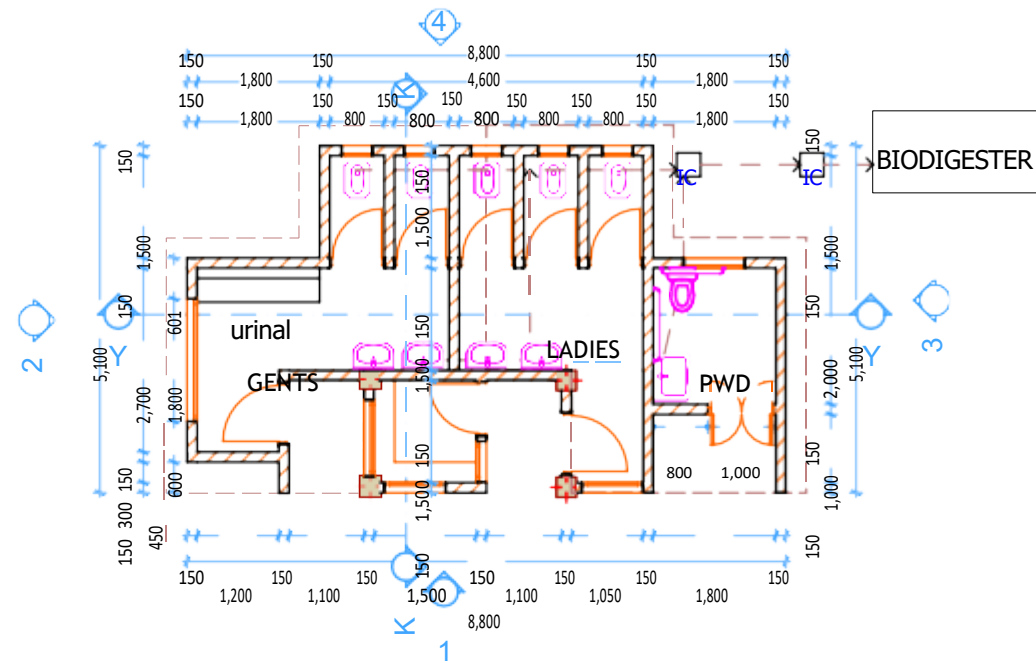
600x150mm strip foundation depth to be determined on site.

- FOUNDATION DETAILS**
1. RC strip foundation to SE details.
 2. 300mm handpacked hardcore packed in 2 layers of 150mm.
 3. 50mm murrum blinding compacted to SE approval.
 4. 1000g DPM to approval.

5. 100mm RC floor slab to SE details.
6. 200mm thick dressed masonry walling in 1:3 mortar to approval.
7. Premise or equally approved antitermite treatment.



ELEVATION 3
Scale:1:100



FLOOR PLAN
Scale:1:100

NOTES

GENERAL

All dimensions are in mm unless otherwise specified.
Drawing are not to scaled. Only figured dimensions to be used.
The contractor must check and verify all dimensions before commencement of any work.

CONSTRUCTION

All slab at ground level to be poured over 1000 gauge polythene sheet on 50mm thick murrum blinding on hardcore.

All soil under slab around and under foundation to be poisoned for termite control.

All soil on cut embankment to be stabilized.The slope not to exceed the natural angle of repose

STRUCTURAL

All black cotton soil to be removed from all buildings and paved

For all R.C work,refer to stuctural Engineer's details.

CIVIL

Depth of foundation to be determined on site to S.E's aproval

All walls less than 150mm thick to be reinforced with hoop iron at every alternate course.

All adjacent R.C. work and masonry walls to be tied with hoop iron at every alternate course.

MECHANICAL

All plumbing and drainage to comply with relevant local authority
SVP denotes soil vent pipe to be provided at the head of the drainage

Drains pass beneath buildings & driveways to be encased in 150mm concrete surround.

The storm drain pipes to comply with BS 556 specification.

All underground foul and waste drain pipes shall be uPVC to comply with BS 5255.

All inspection chambers covers and framing shall be cast iron.

Minimum slope in the drains pipes to be 1 in 100

No chases will be allowed for pipes. Sleeves will be allowed with written approval of structural Eng's. No cutting of concrete without express approval of the Architect or structural Eng.

All testing of pipes must be completed before plastering.
All mechanical works must be co-odinated with electrical and any conflict must be clarified be work begin.

FINISHES

All doors and windows to have permanent ventilations(PV)

All floor finishes to be cement/sand screed unless otherwise instructed

REVISIONS

Project:

PROPOSED TOMATO AGGREGATION CENTRE AT TOGONYE

Drawing Title:

ECO-TOILET BLOCK & BIO-DIGESTER DRAWINGS

Application: CONSTRUCTION

Client: NARIGP

Project No: Drg No:

Sheet 04 of 04			
Scales:	A	B	C
	1 : 100		

Designed by P.M. Drawn H. Karuga

Name Signature Date
G.G.Macharia
H. Karuga



MINISTRY OF TRANSPORT, ROADS & PUBLIC WORKS

DIRECTORATE OF PUBLIC WORKS

(KIRINYAGA COUNTY)

