

MURANG'A COUNTY GOVERNMENT



TENDER No. MCG/1172/2025-2026

NEGOTIATION NO: 2095331/2025-2026

TENDER CLOSING DATE: 27TH JANUARY 2026 AT 10.00 A.M.

**PROPOSED CONSTRUCTION OF 1 NO. CLASSROOM & ABLUTION
BLOCK AT SENIOR POLYTECHNIC AND CONSTRUCTION OF 1 NO.
CLASS FOR MANGOTO ECDE CENTRE-KIMORORI WEMPA WARD**

JANUARY, 2026

**COUNTY SECRETARY
MURANGA COUNTY GOVERNMENT
P.O. BOX 52-10200
MURANGA**

**CHIEF OFFICER INFRASTRUCTURE &
COMMUNITY PROJECTS
MURANGA COUNTY GOVERNMENT
P.O. BOX 52-10200
MURANGA**



INVITATION TO TENDER

PROPOSED CONSTRUCTION OF 1 NO. CLASSROOM & ABLUTION BLOCK AT SENIOR POLYTECHNIC AND CONSTRUCTION OF 1 NO. CLASS FOR MANGOTO ECDE CENTRE-KIMORORI WEMPA WARD.

Murang'a County Government invites sealed tenders for **Proposed Construction Of 1 No. Classroom & Ablution Block at Senior Polytechnic And Construction Of 1 No. Class For Mangoto Ecde Centre-Kimorori Wempa Ward.** tender will be conducted under national competitive bidding using a standardized tender document. Tendering is open to all qualified and interested Tenderers.

1. Tenderers may obtain further information at the Murang'a County Government during official working hours (0800hrs-1300hrs & 1400hrs-1700hrs)
2. Tenderers may view and download a complete set of tender documents electronically from www.tenders.go.ke or from the County website www.muranga.go.ke free of charge.
3. Tenderers who download the tender document must forward their particulars immediately to www.muranga.go.ke to facilitate any further clarification or addendum.
4. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain valid for **150days** from the date of opening of tenders.
5. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
6. Completed tender documents are to be enclosed in plain sealed envelopes (**original**) marked with tender name and reference number and deposited in the tender box and via and an **EXACT REPLICA** submitted on IFMIS on or before **Tuesday 27th January, 2026 at 10.00 a.m.**
7. All tenders shall be submitted electronically and manually.
8. Tenders will be publicly opened immediately after the deadline date and time specified above in the presence of the Tenderers' designated representatives who choose to attend.
9. Late tenders will be rejected.

1. The addresses referred to above are:

a. Address for obtaining further information and for purchasing tender documents

- 1) Murang'a County Government
- 2) Murang'a County Government, P.O. Box 52-10200 Murang'a.

3) Contact Officer: The Head of Procurement, Murang'a County Government

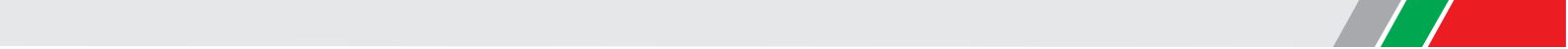
b. Address for submission of tenders

- 1) Murang'a County Government, P.O. Box 52-10200 Murang'a.
- 2) The Head of Procurement, Murang'a County Government
- 3) Tender Box is located at the County Headquarters.

c. Address for opening of tenders

- 1) Murang'a County Government, P.O. Box 52-10200 Murang'a.
- 2) The Head of Procurement, Murang'a County Government
- 3) Tender Box is located at the County Headquarters.

Chief Officer, Infrastructure and Community Projects



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:
- Directly or indirectly controls, is controlled by or is under common control with another tenderer; or
 - Receives or has received any direct or indirect subsidy from another tenderer; or
 - Has the same legal representative as another tenderer; or
 - 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 Atenderer shall not be involved in corrupt, coercive, obstructive, collusive or fraudulent practice. Atenderer that is proven to have been involved 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.

3.6 A 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.

3.7 Tenderer 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.

3.8 Tenderers 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.

3.9 AFirms 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. Atenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

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

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.

3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration 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 zed (*nonames*) 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 devise 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 tenderer pursuant to these requirements, then the tender will be rejected.

19.9 If information submitted by a tenderer 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.

23.2 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.

E. 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 non-material 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.

F. 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 21 days of the date of the letter.

50. Signing of Contract

50.1 Upon the expiry of the fourteen days of the Notification of Intention to enter into contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.

50.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.

50.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period

51. Appointment of Adjudicator

51.1 The Procuring Entity proposes the person named in the **TDS** to be appointed as Adjudicator under the Contract, at the hourly fee specified in the **TDS**, plus reimbursable expenses. If the Tenderer disagrees with this proposal, the Tenderer should so state in his Tender. 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 Special Conditions of Contract (SCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

52. Performance Security

52.1 Within twenty-one (21) days of the receipt of the Letter of Acceptance from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the **TDS**, in accordance with the General Conditions of Contract, subject to ITT 40.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to the Procuring Entity. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent bank is not required.

52.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the **TDS**, or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.

52.3 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings.

53. Publication of Procurement Contract

53.1 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 read out at Tender opening.

54. Procurement Related Complaints and Administrative Review

54.1 The procedures for making Procurement-related Complaints are as specified in the **TDS**.

54.2 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 contract PROPOSED CONSTRUCTION OF 1 NO. CLASSROOM & ABLUTION BLOCK AT SENIOR POLYTECHNIC AND CONSTRUCTION OF 1 NO. CLASS FOR MANGOTO ECDE CENTRE-KIMORORI WEMPA WARD.-. The reference number of the Contract is MCG/1172 /2025-2026.
ITT 3.1	Joint ventures (JVs) tendering is not applicable for this tender
	B. Contents of Tender Document
8.1	(A) Pre-Tender conference SHALL NOT take place.
ITT 8.2	The Tenderer will submit any questions in writing, to reach the Procuring Entity not later than 23 RD January 2025 at 5.00 p.m.
ITT 9.1	For Clarification of Tender purposes, for obtaining further information and for obtaining the tender documents, the Procuring Entity's address is: (1) Name of Procuring Entity: MURANG'A COUNTY GOVERNMENT (2) Physical Location to drop the bids in the Tender Box: MURANG'A COUNTY GOVERNMENT, HEADQUARTER OFFICES, MURANG'A TOWN, GROUND FLOOR (3) Postal address: P.O. BOX 52-10200, MURANG'A. (4) Email address: www.tenders.go.ke or www.muranga.go.ke
	C. Preparation of Tenders
ITT 16.5	The prices quoted by the Tenderer shall be: FIXED
ITT 20.1	The Tender validity period shall be 150 days.
ITT 21.1	A Tender Security SHALL NOT be required. A Tender-Securing Declaration SHALL be required.
ITT 22.1	Only the ORIGINAL of the Tender document shall be required.
ITT 22.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of Power of Attorney authorizing the representative to sign on behalf of the Tenderer.
	D. Submission and Opening of Tenders
ITT 24.1	(A) For <u>Tender submission purposes</u> only, the Procuring Entity's address is: (1) Name of Procuring Entity: MURANG'A COUNTY GOVERNMENT (2) Postal address: P.O. BOX 52-10200, MURANG'A. (3) Physical address for hand Courier Delivery to an office or Tender Box: MURANG'A COUNTY GOVERNMENT, HEADQUARTER OFFICES, MURANG'A TOWN, GROUND FLOOR

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	(4) Date and time for submission of Tenders 27th January 2026 at 10.00 a.m. (5) Tenders shall SUBMIT tenders electronically.
ITT 27.1	The Tender opening shall take place at the time and the address for Opening of Tenders provided below: (1) Name of Procuring Entity: MURANG'A COUNTY GOVERNMENT (2) Physical address for the location: MURANG'A COUNTY GOVERNMENT, HEADQUARTER OFFICES, MURANG'A TOWN, COUNTY PUBLIC SERVICE BOARD CHAMBERS
ITT 27.6	The number of representatives of the Procuring Entity to sign is 3 .
E. Evaluation, and Comparison of Tenders	
ITT 35.2	The invitation to tender is extended to the following groups that qualify for Reservations _____ _____ <i>(These groups are Small and Medium Enterprises, Women Enterprises, Youth Enterprises and Enterprises of persons living with disability, as the case may be; describe precisely which groups qualify).</i>
ITT 37.2 (d)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria.
ITT 54.1	The procedures for making a Procurement-related Complaints are detailed in the "Regulations" available from the PPRA Website www.ppra.go.ke or email complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to: In summary, a Procurement-related Complaint may challenge any of the following: (i) the terms of the Tender Documents; and (ii) the Procuring Entity's decision to award the contract.
Paragraph 3 (1) of the levy order 2023	Contractor to note there shall be paid levy by supplier on all procurement contracts signed between the supplier and a procuring entity , at the rate of Zero point zero three per centum(0.03%) of the value of the signed contract, exclusive of applicable taxes.

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1. General Provisions

Evaluation and contract award Criteria

Murang'a County Government 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. Tenders shall be considered responsive in the Preliminary Evaluation by providing the following mandatory documents.

STAGE 1: - PRELIMINARY & MANDATORY REQUIREMENTS.

At this stage bidder were supposed to submit the following documents as outlined in the tender document.

1. Certificate of incorporation.
2. Copy of recent CR 12 form (Issued within the last Six 6 months from the Tender Opening Date).
3. Copy of Valid Tax Compliance Certificate
4. Properly filled Form of Tender.
5. Valid N.C.A Annual Practicing License with the National Construction Authority for Building works -Category 8 and above.
6. Bidders must submit the IFMIS bids through the system and drop 1 Original copy in the tender box
7. Copy of a Valid business permit from Murang'a County.
8. Completeness of tender document - Bidders shall duly fill all forms/schedules provided for in the document. Any alterations made in the tender document must be countersigned.
9. Serialization of the Bid - The Serialization MUST be numerically sequential starting from Numeric 1.
10. Priced Bill of Quantities - Fill all rates, and amounts, NO Alterations of the Quantities, all bidders own Corrections must be Countersigned, NO Errors noted in the Bills of Quantities
11. Eligibility
 - a. To enhance equity, bidders shall bid for a maximum of Three under this Tender Notice. Bidders who participate in more than Three (3) tenders shall be disqualified.
 - b. Director (s) bidding under different companies for the same tender shall be disqualified
 - c. Director (s) bidding under different companies should not participate in more than Three (3) tenders

Bidders who will not comply with above criteria shall be considered non – responsive at this point and disqualified from further evaluation.

STAGE 2:- TECHNICAL EVALUATION

At this stage bidder were subjected to the following technical criteria as listed in the tender document. Maximum percentage score is as indicated in the table below.

EVALUATION CRITERIA	MINIMUM REQUIREMENT	ITEM DESCRIPTION	Total Marks	Evaluated Score
EVALUATION CRITERIA	MINIMUM REQUIREMENT	ITEM DESCRIPTION	MARKS	MARKS
Financial Capabilities	(i) Bidders shall provide audited balance sheets or other financial statements acceptable to the Procuring Entity, for the last 3 years shall be submitted and	Form FIN - 3.1, with attachments Attachments include: 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	10 MARKS	

	must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability (as demonstrated by Financial Evaluation ratios). (ii) 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 payment) sufficient to meet the construction cash flow requirements estimated at a minimum of percent of the bid price.	membership number from ICPAK must be indicated and a valid practicing license shall be provided) Line of Credit, Bank statements etc		
Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings KShs. 5,000,000 (Five Million) equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 3 years, divided by 3 years	Form FIN - 3.2 Attachments include Financial Statements	5 MARKS	
Ongoing Works	Value of outstanding works shall not be more than the Engineer's Estimate	Value of outstanding works shall not be more than the bid price Form FIN - 3.4 If the outstanding Works is more than the bid price of this bid, the bidder loses the full marks.	5 MARKS	
General Construction Experience	Experience under construction contracts (at least 3 No.) in the role of prime contractor, substantially completed in the last [5 years] prior to the applications submission deadline.	Form EXP -4.1 Attach Letters of Award and Completion Certificates	5 MARKS	

Specific Construction & Contract Management Experience	Participation in contract (s) of a similar nature with minimum cumulative value of KSh. 5,000,000 (Five Million) as filled in Form EXP 4.2(a) that have been satisfactorily and substantially completed by the bidder, as a prime contractor, in the last [5 years] prior to the applications submission deadline. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics	Form EXP 4.2(a)&(b) Provide Letters of Award and Completion Certificates	20 MARKS	
Contractor's Representative and Key Personnel	Curriculum Vitae (CVs) of the Proposed Key Staff must be presented in the provided format and duly signed by the proposed individual. Copies of certificates and Annual Practicing Licenses (for Site Agent and Foreman) and Academic Certificates for all staff is mandatory.	Schedule F (Form PER. 1 and PER. 2) Qualification for Site Agent - minimum Degree in Civil Engineering with a min of 5 years experience. Qualification for Foreman - Min. Diploma in Civil Engineering with a min of 2 years experience.	10 MARKS	
Contractors key equipment	Bidders shall declare they have possession/Ownership of various equipment as proposed to be used in the Project by providing Logbooks that demonstrate proof of ownership For Bidders planning to hire, they shall provide an Active Lease Agreement in Place that can be used during the Project Life. The copy of logbooks of the lessor(s) shall also be provided.	Schedule D of Technical Proposal and log books/ lease letter for tipper, poker compactor, concrete mixturer, . (5 Marks for each Equipment)	15 MARKS	
Proposed	Adequacy and quality	a) Technical approach and	20 MARKS	

methodology	of the proposed methodology	methodology Provided a detailed Work Methodology: Procedure on execution of activities as outlined in the BoQs, Allocation of machinery/labour in execution the activities, Procedures in quality control of the activities described in BoQs Personal protective equipment and Signages.		
Work plan/Program of Works (PoW)	• PoW Resourced with Min. Equipment allocation pursuant to Technical Proposal -	PoW captures Monthly outputs for each activity, PoW details BoQ Quantities, Units and Rates and PoW is superimposed with Cashflow Projections as detailed in Schedule of the technical proposal	10 MARKS	

Total

A minimum technical score of **70 Mks** shall be required for a bidder to proceed to financial evaluation.

STAGE 3:- FINANCIAL EVALUATION.

The winning bidder will be the lowest evaluated and substantially responsive bidder among those who will have passed the preliminary and technical evaluation.

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

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

- a) 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 payment) sufficient to meet the construction cash flow of **Kenya Shillings 3,000,000 (Kenya Shillings Three Million Only)**.
 - ii) Minimum average annual construction turnover of **Kenya Shillings 1,000,000 (Kenya Shillings One Million Only)**, equivalent calculated as total certified payments received for contracts in progress and/or completed within the last **3 (Three)** years.
 - iii) At least **5 (Five)** 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 **1,000,000 (Kenya Shillings One Million Only) or equivalent**.
 - iv) Contractor's Representative and Key Personnel, which are specified as _____
 - v) Contractors key equipment listed on the table "Contractor's Equipment" below and more specifically listed as *[specify requirements for each lot as applicable]* _____
 - vi) 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 **3 (Three)**. The required information shall be furnished in the appropriate form.
 - b) **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.

c) Litigation History

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last **3 (Three)**. 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.

5. QUALIFICATION FORM SUMMARY

1 Item No.	2 Qualification Subject	3 Qualification Requirement	4 Document To be Completed by Tenderer	5 For Procuring Entity's Use (Qualification met or Not Met)
1	Nationality	Certificate of incorporation	Forms ELI – 1.1 and 1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Copy of Valid Tax Compliance Certificate or tax exemption certificate issued by the Kenya Revenue Authority.	Form of Tender	
3	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Form of Tender	
4	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.8	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.7	Forms ELI – 1.1 and 1.2, with attachments	
6	Goods, equipment and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 4.1	Forms ELI – 1.1 and 1.2, with attachments	
7	History of Non-Performing Contracts	Non-performance of a contract did not occur as a result of contractor default since 1 st January 2021.	Form CON-2	
8	Suspension Based on Execution of Tender/Proposal Securing Declaration by the Procuring Entity	Not under suspension based on-execution of a Tender/Proposal Securing Declaration pursuant to ITT 19.9	Form of Tender	
9	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to criteria established in 3.1 and assuming that all pending litigation will NOT be resolved against the Tenderer.	Form CON – 2	
10	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer since 1 st January 2021.	Form CON – 2	
11	Financial Capabilities	(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 payment) sufficient to meet the construction cash flow requirements estimated as Kenya Shillings 3,000,000 (Kenya Shillings Three Million Only) or equivalent for the subject contract(s) net of the Tenderer's other commitments. (ii) The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of	Form FIN – 3.1, with attachments	

1	2	3	4	5
Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		finance to meet the cash flow requirements on works currently in progress and for future contract commitments. (iii) The audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last 3 (Three) years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.		
12	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings 1,000,000 (Kenya Shillings One Million Only) , equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 3 (Three) years, divided by 3 (Three) years	Form FIN – 3.2	
13	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last 3 (Three) years, starting 1 st January 2021.	Form EXP – 4.1	
	Specific Construction & Contract Management Experience	A minimum number of 5 (Five) similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, management contractor or sub-contractor between 1st January [2021] and tender submission deadline i.e. (number) contracts, each of minimum value Kenya Shillings 3,000,000 (Kenya Shillings Three Million Only) or equivalent. The similarity of the contracts shall be based on the following: <i>[Based on Section VII, Scope of Works, specify the minimum key requirements in terms of physical size, complexity, construction method, technology and/or other characteristics including part of the requirements that may be met by specialized subcontractors, if permitted in accordance with ITT 34.3]</i>	Form EXP 4.2(a)	

QUALIFICATION FORMS

1. FORMEQU: EQUIPMENT

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

Item of equipment		
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment ☐ Owned ☐ Rented ☐ Leased ☐ Specially manufactured	

Omit the following information for equipment owned by the Tenderer.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

2 FORM PER -1

Contractor's Representative and Key Personnel Schedule

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

Contractor' Representative and Key Personnel

1.	Title of position: Contractor's Representative	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
2.	Title of position: []	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
3.	Title of position: []	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
4.	Title of position: []	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
5.	Title of position: [insert title]	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

3. **FORM PER-2:**

Resume and Declaration - Contractor's Representative and Key Personnel.

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

Name of Tenderer

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

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

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

Declaration

I, the undersigned *[insert either "Contractor's Representative" or "Key Personnel" as applicable]*, certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

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

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert period (start and end dates) for which this Contractor's Representative or Key Personnel is available to work on this contract]</i>

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

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

Name of Contractor's Representative or Key Personnel: *[insert name]*

Signature: _____

Date: (day month year): _____ Countersignature

of authorized representative of the Tenderer:

Signature: _____ Date: (day month

year): _____

4. 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.

4.1 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 ☐ 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 ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5 ☐ In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing: • 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.

4.2 FORM ELI -1.2

Tenderer's JV Information Form

(to be completed for each member of Tenderer's JV)

Date: _____

ITT No. and title: _____

Tenderer's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 3.6. ☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 3.8. 2. Included are the organizational chart and a list of Board of Directors.

4.3 FORM CON – 2

Historical Contract Non-Performance, Pending Litigation and Litigation History

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
☐ Contract non-performance did not occur since 1 st January <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1.			
☐ Contract(s) not performed since 1 st January <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, requirement 2.1			
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and Kenya Shilling equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Procuring Entity: <i>[insert full name]</i> Address of Procuring Entity: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
☐ No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.			
☐ Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
		Contract Identification: _____ Name of Procuring Entity: _____ Address of Procuring Entity: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____	
Litigation History in accordance with Section III, Evaluation and Qualification Criteria			
☐ No Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4.			
☐ Litigation History in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.4 as indicated below.			

Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Procuring Entity: <i>[insert full name]</i> Address of Procuring Entity: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate “Procuring Entity” or “Contractor”]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>

4.4 **FORM FIN – 3.1:**

Financial Situation and Performance

Tenderer’s Name: _____

Date: _____

JV Member’s Name _____

ITT No. and title: _____

4.4.1. Financial Data

Type of Financial information in _____ (currency)	Historic information for previous _____ years,				
	(amount in currency, currency, exchange rate*, USD equivalent)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					

Type of Financial information in _____ (currency)	Historic information for previous _____ years, (amount in currency, currency, exchange rate*, USD equivalent)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

*Refer to ITT 15 for the exchange rate

4.4.2 Sources of Finance

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

No.	Source of finance	Amount (Kenya Shilling equivalent)
1		
2		
3		

4.4.3 Financial documents

The Tenderer and its parties shall provide copies of financial statements for _____ years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Tenderer or in case of JV member, and not an affiliated entity (such as parent company or group member).
- (b) be independently audited or certified in accordance with local legislation.
- (c) be complete, including all notes to the financial statements.
- (d) correspond to accounting periods already completed and audited.

☐ Attached are copies of financial statements¹ for the _____ years required above; and complying with the requirements

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of Tender, the reason for this should be justified.

4.5 **FORM FIN – 3.2:**

Average Annual Construction Turnover

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

		Annual turnover data (construction only)	
Year	Amount Currency	Exchange rate	Kenya Shilling equivalent
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>		
Average Annual Construction Turnover *			

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

4.6 **FORM FIN – 3.3:**

Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III, Evaluation and Qualification Criteria

Financial Resources		
No.	Source of financing	Amount (Kenya Shilling equivalent)
1		
2		
3		

4.7 FORM FIN – 3.4:

Current Contract Commitments / Works in Progress

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

Current Contract Commitments					
	Name of Contract	Procuring Entity's Contact Address, Tel,	Value of Outstanding Work [Current Kenya Shilling /month Equivalent]	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [Kenya Shilling /month]
1					
2					
3					
4					
5					

4.8 FORM EXP - 4.1

General Construction Experience

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

Page _____ of _____ pages

Starting Year	Ending Year	Contract Identification	Role of Tenderer
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Procuring Entity: _____ Address: _____	

4.9 FORM EXP - 4.2(a)
Specific Construction and Contract Management Experience

Tenderer's Name: _____
 Date: _____
 JV Member's Name _____
 ITT No. and title: _____

Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	Kenya Shilling			
If member in a JV or sub-contractor, specify participation in total Contract amount				
Procuring Entity's Name:				
Address:				
Telephone/fax number				
E-mail:				

4.10 FORM EXP - 4.2 (a) (cont.)

Specific Construction and Contract Management Experience (cont.)

Similar Contract No.	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Construction rate for key activities	
6. Other Characteristics	

4.11 FORM EXP - 4.2(b)

Construction Experience in Key Activities

Tenderer's Name: _____

Date: _____

Tenderer's JV Member Name: _____

Sub-contractor's Name² (as per ITT 34): _____

ITT No. and title: _____

All Sub-contractors for key activities must complete the information in this form as per ITT 34 and Section III, Evaluation and Qualification Criteria, Sub-Factor 4.2.

1. Key Activity No One: _

Information				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor ☐	Member in JV ☐	Management Contractor ☐	Sub-contractor ☐
Total Contract Amount	Kenya Shilling			
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)	Actual Quantity Performed (i) x (ii)	
Year 1				
Year 2				
Year 3				
Year 4				
Procuring Entity's Name:				
Address: Telephone/fax number E-mail:				

² If applicable



	Information
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:	

- 2. Activity No. Two
- 3.

OTHER FORMS

5. 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 any time 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 process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*.

Name of Recipient	Address	Reason	Amount

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

- 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	Tenderer 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.		

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

f) Certification

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

Full Name _____ Title or

Designation _____

(Signature)

(Date)

B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

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].

C. 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 deponed 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.

.....
(Title)

.....
(Signature)

.....
(Date)

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.....

D. 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 bidder 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]

[Witness]

[Signature of the Guarantor]

[Seal]

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

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

Appendix to Tender

Schedule of Currency requirements

Summary of currencies of the Tender for _____ *[insert name of Section of the Works]*

<i>Name of currency</i>	<i>Amounts payable</i>
Local currency: _____	
Foreign currency #1: _____	
Foreign currency #2: _____	
Foreign currency #3: _____	
Provisional sums expressed in local currency	[To be entered by the Procuring Entity]

PART II - WORK REQUIREMENTS

SPECIFICATIONS AND PRICING NOTES

SPECIFICATIONS AND PRICING NOTES

BILL NO. 1

SPECIFICATIONS AND PRICING NOTES

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 Public Works

GENERAL ITEMS

Materials Generally

A.1 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 Specification has been published shall conform with the latest edition thereof 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 specification.

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 specifications has been published shall conform with the British Standards 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.

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 carting remaining material 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 then shall price accordingly and no claim will be allowed for want of knowledge in this respect.

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

B.3 Foundation Excavations

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

with as a variation to the Contractor.

If, however, the Contractor excavates to any greater depths than shown in the drawings or as instructed by the Engineer, then he shall at his own expense fill in such extra depth of excavation with concrete as specified for the foundations to the satisfaction of the Engineer. The Contractor shall not be paid for the cost of any excavation executed deeper or wider than shown on the drawings or instructed by the Engineer nor the cost of back filling such excavation or disposing of surplus.

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 230 mm 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 tonne smooth wheeled roller or a 2 tonne vibrating roller until all movement ceases and 100% 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 230 mm.

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 any termite nests found within the perimeter of the building and within 20 metres 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 Engineer.

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 be stretched 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 thereupon search for and locate such services.

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

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.

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 9B.S. B 10 parts 1 & 2, B.S 8004, BS. 8007) and any other approved Local and International Standards. Where inconsistency exists between these preambles and these Standards, the Contractor shall notify the Engineer in good time for his Clarification as to which of the two implications on the Contract.

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 of a brand and source approved by the Engineer and shall comply With the requirements of K.S.02-21. A manufacturers certificate of test in accordance with K.S.0221 shall be supplied for each consignment delivered to the site.

C.4 Aggregate

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

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

Aggregate shall be delivered to the Site in their prescribed sizes or gradings and shall be stock-piled on paved areas to boarded platforms in separate units to avoid intermixing. **On no account shall premixed cores aggregates be brought to the batching 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 from 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 fine aggregate Per 50 kg. bag of cement	0.12	0.16
Cubic metres of coarse aggregate Per 50kg bag of cement	0.24	0.32

Max. size of coarse aggregate 40mm* 40mm*
*or 20mm for blinding concrete where described.

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

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 minimum 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 site, where concrete is found to be defective after set the concrete shall be cut out and replaced in accordance with the Engineer's instructions. On no account shall any faulty, honeycombed or otherwise defective concrete be required 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 British Standards: -

Hot rolled MS for the Reinforcement of concrete	KS 02-22
Hot rolled MS for the Reinforcement of concrete	KS 4449
Cold worked H .Y. steel for the Reinforcement of concrete	BS4461
Hard drawn steel wire	BS 4482

C.11 Fabric Reinforcement

Fabric reinforcement shall be electrically cross-welded steel wire mesh reinforcement to BS. 1483 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 directed by the Engineer.

C.13 Formwork

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

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

WALLING

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 BS 890 class A for non-hydraulic lime. The lime to 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, 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 stone shall comply with the requirements 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 20 mm 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 unbounded 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 unbounded 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 15 mm to form a square recess. The joints shall then be wetted and new mortar shall be forced into the joints and finished as directed.

GLAZING

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.

E.4 Obscured Glass

To be of type described and as approved Architect.

E.5 Putty

- a) The putty for glazing to wood sashes is to be linseed oil putty all as B.S.644. Workmanship

WORKMANSHIP

E.6 General

Glazing of all types in all locations shall be carefully executed by artisans skilled in this type of work and in conformance with the recommendations of CP 152. Glazing shall be carefully fitted so that it is not subject to pressure and stresses imposed by being an oversight fit within framing.

METALWORK

MATERIALS

F1 Generally

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

F2 Mild Steel

Mild steel shall comply with B.S. 15.

F3 Hollow Section Tubing

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

F4 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.

F5 Galvanized Sheet Steel

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

F6 Stainless Steel

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

F7 Steel Grilles

Steel Grilles shall be manufactured from section conforming with 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.

F8 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.

F9 Painting

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

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

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 (1:4), bedding frames in similar mortar, pointing in mastic, bedding sills, transoms and mullions in mastic, making good finishings around both sides and fixing, and adjusting all fittings and frames.

FLOOR, WALL AND CEILING FINISHINGS

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 KS. 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 finishings bedded in mastic, shall be left with a plain untextured surface.

Troweled beds for flexible finishings shall be finished smooth and free from score marks, 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 fixed with adhesive shall be left with a plain surface.

Troweled backing for flexible 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 finishings in this section shall be thoroughly cleaned. Screech to receive finishings bedded in mortar shall be well wetted before laying is commenced.

PAINTING AND DECORATING

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 evident that the first or best quality of paint is being used, the Architect will order the removal of such materials from the site and rectification of any work executed with those materials, all at the Contractors expense.

H.5 Same maker’s 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 expense, to the satisfaction of the Architect.

H.15 Emulsion paint

Emulsion paint (interior and/or exterior), shall have a **P.V.A.** base and shall be of an approved band. The first coat shall be thinned in accordance with the manufactures instructions. Where described as applied externally, the paint shall incorporate an approved fungicide to prevent fungus growth.

H.16 Black bituminous paint

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

H.20 Primer for iron and steelwork

Primer for iron and steelwork shall be:

- a) Lead based priming paint complying with B.S. 2523, Type B.
 - a) 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 blockwork and brickwork

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

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 painted shall 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 the 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 50 square metres 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 so described, and if permission is granted, such application shall not result in extra cost to the Employer.



REPUBLIC OF KENYA

MINISTRY OF PUBLIC WORKS

GENERAL SPECIFICATIONS
FOR
MECHANICAL PLUMBING AND DRAINAGE
WORKS,
FIRE FIGHTING EQUIPMENTS,
SOLAR WATER HEATING
INSTALLATIONS

ISSUED BY:

CHIEF ELECTRICAL & MECHANICAL ENGINEER (BS)

MINISTRY OF PUBLIC WORKS

P.O. BOX 41191,

NAIROBI.

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1.00 PART 1: GENERAL MECHANICAL SPECIFICATION

1.01 Introduction

This section covers the general requirement for plant, equipment and materials forming part of the mechanical works and shall apply except where specifically stated elsewhere in the Specification.
These works shall be as by regulations and standards.

1.02 Regulations and Standards

The Works shall comply with the current editions of the following:

- a) The Kenya Government Regulations.
- b) The Kenya Bureau of Standards
- c) The National Environmental Management Authority Regulations.
- d) The Kenya Building Code Regulations
- e) Local Authority By-laws.
- f) The Electricity Supply Authority By-Laws
- g) British Standard and Codes of Practice as published by the British Standards Institution (BSI)
- h) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.
- i) The United Kingdom Institution of Electrical Engineers (IEE) Regulations for the Electrical Equipment of Buildings.
- j) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.

1.03 Quality of Materials

All plant, equipment and materials supplied as part of these works shall be new and of first class commercial quality, shall be free from defects and imperfections and where indicated shall be of grades and classifications designated herein.

All products or materials shall be products of quality standards.

Materials and apparatus supplied by others for installation and connection shall be carefully examined on receipt. Any defects noted, should be brought to the attention of the Engineer.

Defective equipment or that damaged in the course of installation or tests shall be replaced as required to the approval of the Engineer.

1.04 Electrical Requirements

Plant and equipment supplied shall be complete with all necessary motor starters, control boards, and other control apparatus. Where control panels incorporating several starters are supplied they shall be complete with a main isolator.

The supply power up to and including local isolators shall be provided and installed by the Electrical specialist. All other wiring and connections to equipment shall form part of mechanical works.

Three copies of all schematic, cabling and wiring Diagrams shall be supplied for the Engineer's approval.

The starting current of all electric motors and equipment shall not exceed the maximum permissible starting currents of the protective switch gear.

All electrical plant and equipment supplied shall be rated for the supply voltage and frequency applicable in Kenya, that is 415 Volts, 50Hz, 3-Phase or 240Volts, 50Hz, 1-phase.

Any equipment that is not rated for the above voltages and frequencies shall be rejected by the Engineer.

1.05 Transport and Storage

All plant and equipment shall, during transportation be suitably packed, crated and protected to minimize the possibility of damage and to prevent corrosion or other deterioration.

On arrival at site all plant and equipment shall be examined and any damage to parts and protective priming coats made good before storage or installation.

Adequate measures shall be taken to ensure that plant and equipment do not suffer any deterioration during storage.

Prior to installation all piping and equipment shall be thoroughly cleaned.

If, in the opinion of the Engineer any equipment has deteriorated or been damaged to such an extent that it is not suitable for installation, the equipment shall be replaced at supplier own cost.

1.06 Site Supervision

There shall be an English-speaking supervisor on the site at all times during normal working hours.

1.07 Installation

Installation of all special plant and equipment shall be carried out by under adequate supervision from skilled staff provided by the plant and equipment manufacturer or his appointed agent in accordance with the best standards of modern practice and to the relevant regulations and standards.

1.08 Testing

1.08.1 Introduction

The Engineer reserves the right to inspect and test or witness of all manufactured plant equipment and materials.

The right of the Engineer relating to the inspection, examination and testing of plant during manufacture shall be applicable to Insurance companies and inspection authorities so nominated by the Engineer.

The Contractor shall give two weeks' notice to the Engineer of his intention to carry out any inspection or tests and the Engineer or his representative shall be entitled to witness such tests and inspections.

Six copies of all test certificates and performance curves shall be submitted as soon as possible after the completion of such tests, to the Engineer for his approval.

Plant or equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Contractor's own risk and should the test certificate not be approved new tests may be ordered by the Engineer at the Contractor's expense.

The foregoing provisions relate to tests at manufacturer's works and as appropriate to those carried out at site.

1.08.2 Material Tests

All material for plant and equipment to be installed under this works shall be tested, unless otherwise directed, in accordance with the relevant KS or B.S Specification concerned.

For materials where no KS or B.S. Specification exists, tests are to be made in accordance with the best modern commercial methods to the approval of the Engineer, having regard to the particular type of the materials concerned.

Specimens and performance tests and analyses to demonstrate conformance of the various materials with the applicable

standards.

If stock material, which has not been specially manufactured for the plant and equipment specified is used, then satisfactory evidence to the Engineer that such materials conform to the requirements stated herein in which case tests of material may be partially or completely waived.

Certified mill test reports of plates, piping and other materials shall be deemed acceptable.

1.08.3 Manufactured Plant and Equipment – Work Tests

The rights of the Engineer relating to the inspection, examination and testing of plant and equipment during manufacture shall be applicable to the Insurance Companies or Inspection Authorities so nominated by the Engineer.

A two weeks' notice shall be given to the Engineer of the manufacturer's intention to carry out such tests and inspections.

The Engineer or his representative shall be entitled to witness such tests and inspections. The cost of such tests and inspections shall be borne by the Manufacturer.

Six copies of all test and inspection certificates and performance graphs shall be submitted to the Engineer for his approval as soon as possible after the completion of such tests and inspections.

Plant and equipment which is shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the Manufacturer's own risk and should the test and inspection certificates not be approved; new tests may be ordered by the Engineer at the manufacturer's expense.

1.08.4 Pressure Testing

All pipework installations shall be pressure tested in accordance with the requirements of the various sections of this Specification. The installations may be tested in sections to suit the progress of the works but all tests must be carried out before the work is buried or concealed behind building finishes. All tests must be witnessed by the Engineer or his representative and a 48 hours' notice to carry out such tests shall be given to Engineer.

Any pipework that is buried or concealed before witnessed pressure tests have been carried out shall be exposed and the specified tests shall then be applied.

A certificate shall be prepared for signature by the Engineer and shall keep a progressive and up-to-date record of the section of the work that has been tested.

1.09 Colour Coding

Unless stated otherwise, all pipework shall be colour coded in accordance with the latest edition of KSISO10526:1999 or B.S 1710 and to the approval of the Engineer.

1.10 Welding galvanized pipes

1.10.1 Preparation

Joints to be made by welding shall be accurately cut to size with edges sheared, flame cut or machined to suit the required type of joint. The prepared surface shall be free from all visible defects such as lamination, surface imperfection due to shearing or flame cutting operation, etc., and shall be free from rust scale, grease and other foreign matter.

1.10.2 Method

All welding shall be carried out by the electric arc processing using covered electrodes in accordance with KS06-206 :1981 (Confirmed 1999) or B.S. 639.

Gas welding may be employed in certain circumstances provided that prior approval is obtained from the Engineer.

1.10.3 Welding Code and Construction

All welded joints shall be carried out in accordance with the following Specifications:

Pipe Welding

All pipe welds shall be carried out in accordance with the requirements of B.S.806.

General Welding

All welding of mild steel components other than pipework shall comply with the general requirements of KS06-1017-2: 1995 or B.S. 1856.

1.11 Welding PP-R pipes by means of electric coupling.

1.11.1 Preparation

The surfaces of the pipes and fittings must be clean and without blemish. Ends must be clean cut at right angles.

1.11.2 Method

Pipes and fittings are inserted to the edge of the matrix and held steady without rotating. Once the heating has been completed the parts are extracted from the heating element and rapidly joined axially

1.11.3 Welding by means of coupling

As the electric coupling can slide along the pipes, it is possible to carry out repairs and welds in any part of an existing plant. The parts to be joined must be clean free of grease and perfectly aligned. After inserting the parts to be welded in the coupling, the coupling has to be electrically connected to the welding machine

1.12.0 Welders' Qualifications

Any welder employed shall have passed the trade tests as laid down by the Government of Kenya.

The Engineer may require to see the appropriate certificate obtained by any welder and should it be proved that the welder does not have the necessary qualifications the Engineer may instruct to replace him with a qualified welder.

2.00 PART2: PARTICULARS SPECIFICATIONS FOR PLUMBING AND DRAINAGE

2.01 Introduction

This section covers the general requirements for plant, equipment and materials forming for the plumbing and drainage installations.

2.20 MATERIALS AND STANDARDS

2.2.1 Pipework and Fittings

Pipework materials are to be used shall be as follows:

a) Galvanized Steel Pipework

Galvanized steel pipe works up to 65mm nominal bore shall be manufactured in accordance with KS06.366:1982 or B.S. 1387 Medium Grade, with tapered pipe threads in accordance with B.S. 21. All fittings shall be malleable iron and manufactured in accordance with KS06-885:1995 or B.S. 143.

Pipe joints shall be screwed and socketed and sufficient coupling unions shall be allowed so that fittings can be disconnected without cutting the pipe. Running nipples and long screws shall not be permitted unless exceptionally approved by the Engineer.

Galvanized steel pipe work, 80mm nominal bore up to 150mm nominal bore shall be manufactured to comply in all respects with the specification for 65mm pipe, except that screwed and bolted flanges shall replace unions and couplings for the jointing of pipes to valves and other items of plant. All flanges shall comply with the requirements of B.S. 10 to the relevant classifications contained hereinafter under Section „C“ of the Specification.

Galvanizing shall be carried out in accordance with the requirements of B.S. 1387 and B.S. 143 respectively.

Polypropylene Pipes –Random (PP-R) Type 3

PP-R type3 pipe work shall be manufactured in accordance with B.S. 7291 part 2001. Dimensions and quality of PP-R Pipes shall be in accordance with DIN 8077 and pipelines in plastics materials joints, Components parts, Installation to be in accordance DIN 16928. joints and fittings to be in accordance DIN 16962.

Copper Tubing

All copper tubing shall be as manufactured in accordance with B.S. 2871 from C.160 „Phosphorous De-oxidized Non-Arsenical Copper“ in accordance with B.S. 1172.

Pipe joints shall be made with soldered capillary fittings and connections to equipment shall be with compression fittings as manufactured in accordance with B.S. 864.

Short copper connection tubes between galvanized pipe work and sanitary fittings shall not be used because of the risk of galvanic action.

If, as may occur in certain circumstances, it is not possible to make the connection in any way than the use of copper tubing, then a brass straight connector shall be positioned between the galvanized pipe and the copper tube in order to prevent direct contact.

d) Poly-vinyl Chloride (P.V.C). Pressure Pipes and Fittings

All P.V.C. pressure pipes and fittings shall be as manufactured in accordance with KS06-478-2:1993 (B.S. 3505: 1968).

Jointing

The method of jointing to be employed shall be that of solvent welding, using the pipe and manufacturer's approved cement. Seal ring joint shall be introduced where it is necessary to accommodate thermal expansion.

Testing

Pipelines shall be tested in sections under an internal water pressure normally one and a half times the maximum allowable working pressure of the class of pipe used. Testing shall be carried out as soon as practical after laying and when the pipeline is adequately anchored. Precautions shall be taken to eliminate all air from the test section and to fill the pipe slowly to avoid risk of damage due to surge.

e) A.B.S. Waste System

Where indicated on the Designs and Schedules, the contractor shall supply and fix A.B.S. waste pipes and fittings.

The pipes, traps and fittings shall be in accordance with the relevant British Standards, including B.S. 3943 or KS06- 7831-1:1990, and fixed generally in accordance with manufacturer's instructions and B.S. 5572: 1978.

Jointing of pipes shall be carried out by means of solvent welding, the manufacturer's instructions according to B.S. 5572: 1978.

Standard brackets, as supplied for use with this system, shall be used wherever possible.

Where the building structure renders this impracticable the contractor shall provide purpose made supports, centers of which shall not exceed one meter.

Expansion joints shall be provided as indicated. Supporting brackets and pipe clips shall be fixed on each side of these joints.

f) Poly-vinyl Chloride (P.V.C) Pipes and fittings

The contractor shall supply and fix PVC soil pipes and fittings as indicated on the Designs and Schedules.

Pipes and fittings shall be in accordance with relevant British Standards, including B.S. 4514 and fixed to the manufacturer's instructions and B.S. 5572.

The soil system shall incorporate synthetic rubber gaskets as provided by the manufacturer whose fixing instructions shall be strictly adhere to.

Connections to WC pans shall be effected by the use of a WC connector, gasket and cover, fixed to suit pan outlet. Suitable supporting brackets and pipe clips shall be provided at maximum of one metre centres.

The contractor shall be responsible for the joint into the Gully Trap on Drain as indicated on the Drawings.

2.2.2 Valves

a) Draw-off Taps and Stop Valves (Up to 50mm Nominal Bore)

Draw-off taps and valves up to 50mm nominal bore, unless otherwise stated or specified for attachment or connection to sanitary fitment shall be manufactured in accordance with the requirements of B.S.1010.

b) Gate Valves

All gate valves 80mm nominal bore and above, other than those required for fitting to buried water mains shall be of cast iron construction, in accordance with the requirements of B.S. 3464. All gate valves required for fitting to buried water mains shall be of cast iron construction in accordance with the requirements of B.S.1218.

All gate valves up to and including 65mm nominal bore shall be of bronze construction in accordance with the requirements of B.S. 1952.

The pressure classification of all valves shall depend upon the pressure conditions pertaining to the site of works.

c) Globe Valves

All globe valves up to and including 65mm nominal bore shall be of bronze construction in accordance with the requirements of B.S.3061 or KS06-885:1995.

The pressure classification of all globe valves shall depend upon the pressure conditions pertaining to the site of works.

2.2.3 Waste Fitment Traps

a) Standard and Deep Seal P & S Traps

Where standard or deep seal traps are specified they shall be manufactured in suitable non-ferrous materials in accordance with the full requirements of B.S. 1184.

In certain circumstances, cast iron traps may be required for cast iron baths and in these instances bath traps shall be provided which are manufactured in accordance with the full requirements of B.S.1291.

b) Anti-Syphon Traps

Where anti-syphon traps are specified, these shall be similar or equal to the range of traps manufactured by Greenwood and Hughes Limited, Deacon Works Little shampton, Sussex, England or equal and approved.

The trade name for traps manufactured by this company is „Grevak“.

2.2.4 Pipe Supports

a) Introduction

This deals with pipe supports securing pipes to the structure of buildings for above ground application.

The variety and type of support shall be kept to a minimum and their design shall be such as to facilitate quick and secure fixings to metal, concrete, masonry or wood.

Consideration shall be given, when designing supports, to the maintenance of desired pipe falls and the restraining of pipe movements to a longitudinal axial direction only.

The contractor shall supply and install all steelwork forming part of the pipe support assemblies and shall be responsible for making good damage to builders' work associated with the pipe support installation.

The contractor shall submit all his proposals for pipe supports to the Engineer for approval before any erection works commence.

b) Steel and Copper Pipes and Tubes

Pipe runs shall be secured by clips connected to pipe angers, wall brackets, or trapeze type supports. „U“ bolts shall not be used as a substitute for pipe clips without the prior approval of the Engineer.

An approximate guide to the maximum permissible supports spacing in metres for steel and copper pipe and tube is given in the following table for horizontal runs.

Size Nominal Bores	to B.S. 659	Copper Tube Steel Tube to B.S. 1387
15mm	1.25m	2.0m
20mm	2.0m	2.5m
25mm	2.0m	2.5m
32mm	2.5m	3.0m
40mm	2.5m	3.0m
50mm	2.5m	3.0m
65mm	3.0m	3.5m
80mm	3.0m	3.5m
100mm	3.0m	4.0m
125mm	3.0m	4.5m
150mm	3.5m	4.5m

The support spacing for vertical runs shall not exceed one and a half times the distances given for horizontal runs.

c) Expansion Joints and Anchors

Where practicable, cold pipework systems shall be arranged with sufficient bends and changes of direction to absorb pipe expansion providing that the pipe stresses are contained within the working limits prescribed in the relevant B.S. specification.

Where piping anchors are supplied, they shall be fixed to the main structure only. Details of all anchor design proposals shall be submitted to the Engineer for approval before erection commences.

The contractor when arranging his piping shall ensure that no expansion movements are transmitted directly to connections and flanges on pumps or other items of plant.

The contractor shall supply flexible joints to prevent vibrations and other Movements being transmitted from pumps to piping systems or vice versa.

2.2.5 Sanitary Appliances

All sanitary appliances supplied and installed as part of the works shall comply with the general requirements of B.S. C Practice 305 and the particular requirements of the latest B.S. Specifications.

2.2.6 Pipe Sleeves

Main runs of pipework are to be fitted with sleeves where they pass through walls and floors. Generally, the sleeves shall be of P.V.C. except where they pass through the structure, where they shall be mild steel. The sleeves shall have 6mm – 12mm clearance all around the pipe or for insulated pipework all around the installation.

The sleeve will then be packed with slag wool or similar.

2.3 INSTALLATION

2.3.1 Introduction

Installation of all pipework, valves, fittings and equipment shall be carried out under adequate supervision from skilled relevant codes and standards as specified herein. The contractor shall be responsible to for ensuring that all builders work with his piping installation is carried out in a satisfactory manner to the approval of the Engineer.

2.3.2 Above Ground Installation

a) Water Services

Before any joint is made, the pipes shall be hung in their supports and adjusted to ensure that the joining faces are parallel and any falls which shall be required are achieved without springing the pipe.

Where falls are not shown or stated elsewhere in the Specification, pipework shall be installed parallel to the lines of the buildings and as close to the walls, ceilings, columns, etc., as is practicable.

All water systems shall be provided with sufficient drain points and automatic air vents to enable them to function correctly.

Valves and other user equipment shall be installed with adequate access for operation and maintenance. Where valves and other operational equipment are unavoidably installed beyond normal reach or in such position as to be difficult to reach from a small step ladder, extension spindles with floor or wall pedestals shall be provided.

Screwed piping shall be installed with sufficient number of unions to facilitate easy removal of valves and fittings, and to enable alterations of pipework to be carried out without the need to cut the pipe.

Full allowances shall be made for the expansion and contraction of pipework, precautions being taken to ensure that any force produced by the pipe movements are not transmitted to valves, equipment or plant.

All screwed joints to piping and fittings shall be made with P.T.F.E. tape.

The test pressure shall be maintained by the pump for about one hour and if there is any leakage, it shall be measured by the quantity of water pumped into the main in that time. A general leakage of 4.5 litres per 25mm of diameter, per 1.6 kilometres per 24 hours per 30 metres head, may be considered reasonable but any visible individual leak shall be repaired.

b) Sanitary Services

Soil, waste and vent pipe system shall be installed in accordance with the best standard of modern practice as described in B.S. 5572 to the approval of the Engineer.

The contractor shall be responsible for ensuring that all ground waste fittings are discharged to a gully trap before passing to the sewer via a manhole.

All necessary rodding and inspection facilities within the draining system in positions where easy accessibility is available.

Where a branch requires rodding facilities in a position to which normal access is unobtainable, then that branch

shall be extended so as to provide a suitable purpose made rodding eye in the nearest adjacent wall or floor to which easy access is available.

The vent stacks shall terminate above roof level and where stack passes through roof, a weather skirt shall be provided. The contractor shall be responsible for sealing the roof after installation of the stacks.

The open end of each stack shall be fitted with a plastic coated or galvanized steel wire guard. Access for rodding and testing shall be provided at the foot of each stack.

c) **Sanitary Appliances**

All sanitary appliances associated with the works shall be installed in accordance with the best standard of modern practice as described in C.P. 305 to the approval of the Engineer.

2.4 0 TESTING AND INSPECTION

2.4.1 Site Tests– Pipework Systems

a) **Above Ground Internal Water Services Installation**

All water service pipe system installed above ground shall be tested hydraulically for a period of one hour to not less than one and half times to design working pressure.

If preferred, testing the pipelines in sections may be done. Any such section found to be satisfactory need not be the subject of a further test when system has been completed, unless specifically requested by the Engineer.

During the test, each branch and joint shall be examined carefully for leaks and any defects revealed shall be made good by the Sub-contractor and the section re-tested.

All necessary precautions to be taken to prevent damage occurring to special valves and fittings during the tests. Any item damaged shall be repaired or replaced at the Sub-contractor's expenses.

b) **Above Ground Soil Waste and Ventilation System**

All soil, waste and ventilating pipe system forming part of the above ground installation, shall be given appropriate test procedures as described in B.S. 5572, 1972.or KS02-254:1986

Smoke tests on above ground soil, waste and ventilating pipe system shall not be permitted. Pressure tests shall be carried out before any work which is to be concealed is finally enclosed. In all respects, tests shall comply with the requirements of B.S. 5572.

2.4.2 Site Test–Performance

Following satisfactory pressure test on the pipework system operational tests shall be carried out in accordance with the relevant B. S. Code of practice on the systems as a whole to establish that special valves, gauges, control, fittings, equipment and plant are functioning correctly to the satisfaction of the Engineer.

All hot water pipework shall be installed with pre-formed fibre glass lagging to a thickness of 25mm where the pipe runs above a false ceiling or in areas where the ambient temperature is higher than normal with the result that pipe "sweating", due to condensation will cause nuisance.

All lagged pipes which run in a visible position after erection shall be given a canvas cover and prepared for painting as follows:

- i) Apply a coating of suitable filler until the canvas weave disappears and allow to dry.
- ii) Apply two coats of an approved paint and finish in suitable gloss enamel to colors
- iii) Approved by the Engineer.

All lagging for cold and hot water pipes erected in crawlways, ducts and above false ceiling which after erection are not visible from the corridors of rooms, shall be covered with a reinforced aluminum foil finish banded in colours to be approved by the Engineer.

In all respects, unless otherwise stated, the hot and cold water installation shall be carried out in accordance with the best standard of modern practice and described in C.P.342 and C.P.310 respectively to the approval of the Engineer.

The test pressure shall be applied by means of a manually operated test pump or, in the case of long main or mains of large diameter, by a power driven test pump which shall not be left unattended. In either case precaution shall be taken to ensure that the required pressure is not exceeded.

Pressure gauges should be recalibrated before the tests.

The contractor shall be deemed to have included in his price for all test pumps, and other equipment required under this specification.

The test pressure shall be one and a half times the maximum working pressure except where a pipe is manufactured from a material for which the relevant B.S. specification designates a maximum test pressure.

2.5 STERILISATION OF COLD WATER SYSTEM

All water distribution system shall be thoroughly sterilized and flushed out after the completion of all tests and before being fully commissioned for handover.

The sterilization procedures shall be carried out in accordance with the requirements of B.S. Code of Practice 301, Clause 409 and to the approval of the Engineer.

3.01 INTRODUCTION

The general specification details the requirements for the supply and installation and commissioning of the Portable Fire Extinguishers.

The contractor shall include for all appurtenances and appliances not necessarily called for in this specification or shown on the designs but which are necessary for the completion and satisfactory functioning of the works.

If in the opinion of the Sub-contractor there is a difference between the requirements of the Specifications and th he shall clarify these differences with the Engineer before tendering.

3.02 WATER/CO₂ EXTINGUISHERS

These shall be 9-litre water filled CO₂ cartridge operated portable fire extinguishers and shall comply with B.S. B.S. 1288.or KSISO7165:1999 and to the requirements of B.S.1004. Unless manufactured with stainless steel, have all internal surfaces completely coated with either a lead tin, lead alloy or zinc applied by hot dipping. The no visibly uncoated areas.

The extinguishers shall be clearly marked with the following:

- a) Method of operation.
- b) The words “WATERTYPE” (GAS PRESSURE) in prominent letters.
- c) Name and address of the manufacturer or responsible vendor.
- d) The nominal charge of the liquid in imperial gallons and litres.
- e) The liquid level to which the extinguisher is to be charged.
- f) The year of manufacture.
- g) A declaration to the effect that the extinguisher has been tested to a pressure of 24.1 bar (350 p.s.i.).
- h) The number of British Standard “B. S” 1004 or B.S. 1449.

3.03 PORTABLE CARBON DIOXIDE FIRE EXTINGUISHERS

These shall be portable carbon dioxide fire extinguishers and shall comply with B.S. 1004.or KSISO7165:1999

The body of extinguisher shall be a seamless steel cylinder manufactured to one of the following British Standard 401 or B.S. 1288. (EN3:1996)

The filling ratio shall comply with B.S. 5355 with valves fittings for compressed gas cylinders to B.S.341. The fitted it shall be flexible and have a minimum working pressure of 206.85 bar (3000 p.s.i.). The hose is not to be internal pressure until the extinguisher is operated.

The nozzle shall be manufactured of brass gunmetal, aluminum or stainless steel and may be fitted with a suitable for temporarily stopping the discharge if such means are not incorporated in the operating head.

The discharge horn shall be designed and constructed so as to direct the discharge and limit the entrainment of a be constructed of electrically non-conductive material.

The following markings shall be applied to the extinguishers: -

The words “Carbon Dioxide Fire Extinguisher” and to include the appropriate nominal gas content.

- a) Method of operation.

- b) The words “Re-charge immediately after use”.
- c) Instructions for periodic checking.
- d) The number of the British Standard B.S. 3326: 1960 or B.S. 5423.
- e) The manufacturers name or identification markings

3.04 DRY CHEMICAL POWDER PORTABLE FIRE EXTINGUISHER

The portable dry powder fire extinguishers shall comply with BS 1449 or KSISO7165:1999 and BS 1004. The be constructed to steel not less than the requirements of BS 1449 or aluminum to BS 1470: 1972(EN3: 1996) a suitably protected against corrosion.

The dry powder charge shall be not-toxic and retain its free flowing properties under normal storage conditions. pressurizing agent used as an expellant shall be in dry state; in particular, compressed air.

The discharge tube and gas tube if either is fitted shall be made of steel, brass, copper or other not less suitable m Where a hose is provided it shall not exceed 1,060mm and shall be acid and alkali resistant.

Provision shall be made for securing the nozzle when not in use.

The extinguisher shall be clearly marked with the following information

- a) The word “Dry Powder FireExtinguisher”
- b) Method of operation in prominentletters.
- c) The working pressure and the weight of the powder chargein Kilogramme.
- d) Manufacturers name or identificationmark
- e) The words “RECHARGE AFTER USE” if rechargeable type.
- f) Instructions to regularly check the weight of the pressure container(gas Cartridge) or inspect the pressure indicator on stored pressure types when fitted, and remedy any loss indicated by either.
- g) The year of manufacture.
- h) The Pressure to which the extinguisherwas tested.
- i) The number of this British Standard BS 3465 or BS 5423: 1977.
- j) When appropriate complete instructions for charging the extinguisher shall be clearly marked on the extinguisher or otherwise be supplied with the refill.

3.05 AIR FOAM FIREEXTINGUISHER

These shall be of 9 litres capacity complete with refills cartridges and wall fixing brackets and complying with B 3/BS 1449 and BS 1004 with the following specifications: -

Cylinder: to B.S. 1449 or KSISO7165:1999

Necking: to be 76mm outside diameter steel EN 3A 23/4 X 8TPI female thread.

Head cap: to be plastic molding acetylnresin.

CO2Cylinder: to be 75gm P.V.C coated.

Internal Finish: to be polythene lining on phosphate coating.

External finish: to be phosphate - One coat primer paint and one coat stove enamel B.S. 381 C.

4.07 FIRE BLANKET

The fire blanket shall be made from cloth woven with pre-asbestos yarn or any other fire proof material and to m 1800 x 1210 mm and shall be fitted with special tapes folded so as to offer instantaneous single action to release from storing jacket to BS 1721.

4.08 SIGNAGE -FIRE EXIT SIGN

Proceed and procure and install as below;

Print Fire Exit signs on the Perspex plate, 5mm thick, with white colour background as follows: -

1. Lettering IN RED COLOUR of not less than 50mm in height.
2. A pendant sign bearing words, FIRE EXIT and with a directional arrow.

The sign must be capable of being read from both approaches to exit and so is double sided.

4.09 SIGNAGE -FIRE INSTRUCTION NOTICE

Print fire instruction on the Perspex plate, 5mm thick with White Colour Background measuring 510mm lengthx380mm width as follows;

FIRE INSTRUCTION NOTICE

In the event of fire;

- (1) Raise the alarm by actuating the nearest alarm system point, Sound Siren /gong or Shout Fire
- (2) Attack fire using the nearest available equipment
- (3) Call fire Brigade 222181 or Police 999 and inform your switchboard (PABX) Operator
- (4) Ensure that all personnel not involved in firefighting evacuation to safety outside the building.
- (5) Close but DO NOT LOCK doors behind as you leave.
- (6) Evacuate the building using stairs or fire escapes do not use Lifts/escalators walk calmly. Avoid panic. Do not stop or return for personal belongings.
- (7) Assemble as per floor outside the building for roll call.

4.00 PART 4: PARTICULAR SPECIFICATIONS FOR THE SUPPLY, INSTALLATION AND COMMISSIONING OF THE HOSE REEL SYSTEM

4.01 Introduction

The general specification details the requirements for the supply, installation and commissioning of the hose reel. The hose reel installation shall comply in all respects to the requirements set out in C.O.P. 5306 PART 1 : 1976, AND BS 5

4.02 Climatic Conditions

- a) The following climatic conditions apply at the site of the works and all plant, equipment, apparatus, materials and installations shall be suitable for these conditions.
- b) Where not otherwise stated, all ratings of plant, equipment, apparatus shall be interpreted as site rating and NOT sea level or other ratings.
- c) Maximum temperature oC
- d) Minimum Temperature oC
- e) Average Temperature oC – oC
- f) Range of Relative Humidity – %
- g) Altitude M

- h) Latitude o"S
- i) Longitude o"E
- j) Rainfall extremely heavy at certain period of the year.

4.03 Fire Hose reel Pumps

The fire pump set shall be a fully automatic package unit. The unit shall consist of pumps of appropriate duty at a head
The complete specification of the package pump set to be as follows: -

- a) **PUMPS**
(Specify)

- b) **PUMP MATERIALS**

Suction and Discharge Casing to be made Grey Iron. Shafts, conveyors, diffusers, impellers and the external ele from Stainless Steel.

- c) **MOTORS**

(specify)

- d) **MECHANICAL SEAL**

(specify)

- e) **BASEFRAME**

Welded fabrication from Mild Steel sections. With facility for lifting unit.

- f) **PIPEWORK**

Medium gauge Galvanized Pipework to B.S. 1387 and Galvanized fittings to B.S. 143/1256. All Pipework to the with B.S 4504 NP. 16 Flanges. Flexible connections to be affixed to suction and discharge connections.

- g) **VALVE**

Pump Isolating Valves, Butterfly valve to B.S. 5155 with Cast Iron nylon coated disc and black air rile liner.
Non-Return Valve vertical lift type to be manufactured from Cast Iron with nitrile seal.

- h) **CONTROL PANEL**

Standard Panel cubicle to be manufactured to IP. 55 standards, containing Starters0000000000000000 of appropriate ratings

Panel to include power On Light, Run and Trip Lights, Hand/Off/Auto switches, duty pump selector switch, disconnect switch and line and control circuit fuses, switches to conform to IP. 54.

Safety features to include 24 volts low voltage controls except for starter coils. Panel mounted on vibration isolators to minimize vibration to electrical equipment.

- i) **PRESSURE SWITCH:**

Differential adjustment type switch manufactured to IP.14standards.

Multi-pump sequencing control to be affected from a single pressure instrument, utilizing control circuitry specially for pressure boosting applications.

j) 4" Dial Bottom Connection to B.S. 1780 calibrated in Bars and KPa.

K) MEMBRANE TANK

Fabricated Steel construction housing a natural rubber diaphragm, ideally suited for drinking water applications. Precharged with Nitrogen to correct pressure at test stage.

The panel shall incorporate HRC main fuses and thermal overloads for the pump motors, timer control unit for m run period, start relay incorporating timing element for standby pump delay and one set of voltage free cha contacts to give remote alarm/indication for the indicator lights motioned.

L) Pipework

The Pipework for the hose reel installation shall be galvanized wrought steel tubing "Medium" Grade Class "B" 1387:1967 with pipe threads to BS 21.

M) Pipe Fittings

The pipe fittings shall be wrought steel pipe fittings welded or seamless fittings conforming to BS 1740 Part 197 malleable iron fittings to BS 143.

All changes in direction will be standard bends or long radius fittings.No. elbows will be permitted.

N) Flanges

The flanges shall comply with BS 4504: 1969. All flanges shall comply to a nominal pressure rating of 16 bar (P.N. 16) and shall be of either cast iron or steel.

O) Gaskets

The gaskets for the use with flanges to BS 4304: 1969 shall comply with BS 4865 part 1: 1072 for pressure up exceeding 64 bar.

P) Non-return Valves

The non-return valves up to and including 80mm diameter shall be to BS 5153: 1974 with flanges to BS 4504 P

Q) Gate Valves

The gate valves upto and including 80mm shall be as Crane NO. D151 non-rising stem and wedge disc to BS 21 thread.

R) Sleeves

Where pipework passes through walls, floors or ceilings, a sleeve shall be provided one diameter larger than the of the pipe, the space between to be packed with mineral wool, to the Engineer's approval.

S) Floor and ceiling plates

Where pipe pass through floors, walls or ceilings, floor, wall and ceiling plates shall be secured around the pipe. shall be of stainless steel construction and will serve no other purpose than to present a net finish, to the exposed installation.

T) Hose reels

The hose reels to the installation shall consist of recess and no-recess automatic hose reels.

All the above hose reels shall comply with BS 5274: 1976 and BS 3169: 1970 and is to requirements C.P. 5306 1976.

The hose reels shall be supplied and installed complete with first-aid non-kinking hose 30 metres long, with nylon spray/jet/shut-off nozzle fitted. A screw down chrome plated globe valve to BS 1010 to the inlet to the reel.

The orifice to the nozzle is to be not less than 4.3 mm to maintain a minimum flow of 0.4L/s to the jet.

U) Earthing

The hose reel installation shall be electrically earthed by a direct earth connection.

V) Finish Painting

Upon completion of testing and commissioning of the hose reel installation the pipework shall be primed and fin with 2 No. coats of paint to the Engineer's requirements.

W) Testing and Commissioning

The hose reel system is to be flushed out before testing to ensure that no builders debris has entered the system. is to be then tested to one and half times the working pressure of the installation to the approval of the Engineer. fault condition of the pumping equipment, is to be carried out before acceptance of the system by the Engineer a Architect.

X) Instruction Period

The Sub-Contractor shall allow in his contract sum for instructing of use of the equipment to the clients maintain The period of instruction may be within the contract period but may also be required after the contract period ha

The period of time required shall be stipulated by the Client but will notified within seven days in which time staff shall be instructed in the operation and maintenance of the equipment.



REPUBLIC OF KENYA

MINISTRY OF PUBLIC WORKS

GENERAL SPECIFICATIONS FOR ELECTRICAL INSTALLATION WORKS

ISSUED BY:

CHIEF ELECTRICAL & MECHANICAL ENGINEER (BS)

MINISTRY OF PUBLIC WORKS

P.O. BOX 41191,

NAIROBI.

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GENERAL SPECIFICATION

OF

MATERIALS AND WORKS

GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

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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.

2.4 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.

2.5 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.

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

The tripping mechanism shall be on inverse characteristic to prevent tripping in temporary overloads and shall not be affected by normal 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: Ivorian 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

2.7 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.

2.8 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 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 center 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. Pat tresses shall be fitted where required to outlets on surface conduit runs.

Adaptable boxes are to be of PVC or mild steel (of not less than 12swg) and black enameled or galvanized finish according to location. They shall be of square or oblong shape location. They shall be of square or oblong shape complete with lids secured by four 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 fuse boards; -

- (i) Shall be Ivorian 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 armoring 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 hard 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 Armored Cables	-	Ks 04-194:1990
Armoring 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 armor of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armor shall have a resistance not more than twice of the largest current carrying conductor of the cable.

P.V.C./S.W.A./P.V.C cables shall be terminated using "Telecom" "B" type or approved equal or approved equal glands and a P.V.C. tapered sleeve shall be provided to shroud each gland.

Where cables rise from floor level to switchgear etc., they shall be protected by P.V.C. conduit, to a height of 600mm from finished floor level, whether the 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 galvanized mild steel back straps or similar approved equal method. For one or two cables run together the cleats shall be fixed a special channel section supports or back straps described above which shall in turn be secured to walls or ceilings of ducts by rambolts.

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 black straps shall also be used for securing cables in vertical ducts.

Cables supports shall be fixed at 600mm maximum intervals, the supports being supplied and erected under this Sub-contract. Saddles shall not be used for supporting cables nor any other type of fixing other than one of the two 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 colour 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 30Amp 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 LAMP HOLDERS

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

The 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 up to 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 STREET LIGHTING

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 murrum 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 galvanized. Conduit fittings, accessories or equipment used in conjunction with galvanized conduits shall also be galvanized 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 galvanized, the links shall be made by galvanized flat ironstrips.

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 of fuse boards, 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 galvanized conduit and trunking, the trunking shall be deemed to be galvanized 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 enameled tubing and galvanizing paint for galvanized tubing immediately after the conduits are erected. All bends and sets shall be made cold without altering the section of the conduit. The inner radius of the bend shall not be less than four (4) times the outside diameter of the conduit. Not more than two right angle bends will be permitted without the inter-position of a draw-in-box. Where straight runs of conduit are installed, draw-in-boxes shall be provided at distances not exceeding 15mm. No tees, elbows, sleeves, either of inspection or solid type, will be permitted.

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

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

All boxes shall conform to KS 04 – 668: 1986, to be of malleable iron, and black enameled or galvanized according to the type of conduit specified. All 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, galvanized boxes shall be used and painted after erection.

Draw-in boxes in the floors are generally to be avoided but where they are essential they must be grouped in positions approved by the 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 bit mastic 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 and Lighting Company Limited, and Communications Commission of Kenya (CCK).

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

- 21 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.
- 22 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).
- 23 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.

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

3. Language and Law

- 31 The language of the Contract is English Language and the law governing the Contract are the Laws of Kenya.
- 32 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

- 41 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

- 51 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

- 61 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

- 71 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

- 81 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

- 91 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.
- 92 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.
- 93 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

- 101 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 Works are to be executed.
- 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 affect 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

- 161 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

- 171 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 172 The Contractor shall be responsible for design of Temporary Works.
- 173 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 174 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 175 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

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

19. Discoveries

- 191 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

- 201 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

- 211 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

- 221 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 222 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.
- 223 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

- 231 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.
- 232 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

241 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.

242 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 amicable settlement has been made.

243 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.

244 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.

245 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.

246 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.

247 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.

248 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. Time 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.

264 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

271 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.

272 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

281 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.

282 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

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

30. Management Meetings

301 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.

302 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

311 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.

312 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. Quality Control

32. Identifying Defects

321 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

- 331 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

- 341 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.
- 342 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

- 351 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

- 361 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

- 371 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.
- 372 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

- 381 All Variations shall be included in updated Programs⁹ produced by the Contractor.
- 382 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.
- 383 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.
- 384 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 lump sum contracts, add "and Activity Schedules" after "Programs." ¹⁰In lump sum contracts, delete this paragraph.

- 385 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning
- 386 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
- 387 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.
- 388 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.
- 389 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 FlowForecasts

- 391 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

- 401 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 402 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 403 The value of work executed shall be determined by the Project Manager.
- 404 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed¹².
- 405 The value of work executed shall include the valuation of Variations and Compensation Events.
- 406 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.
- 407 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 a 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."

424 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

431 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

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

45. Price Adjustment

451 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:

the Contract Price payable.

P is the adjustment factor for the portion of

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.

452 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

461 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.

462 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

471 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.

472 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

481 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

- 491 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.
- 492 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.
- 493 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

- 501 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. Dayworks

- 511 If applicable, the Dayworks 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.
- 512 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 513 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

52. Cost of Repairs

- 521 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 theContract

53. Completion

- 531 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

- 541 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

- 551 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.

¹³The 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

- 561 If “as built” Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.
- 562 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

- 571 The Procuring Entity or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 572 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.
- 573 Notwithstanding the above, the Procuring Entity may terminate the Contract for convenience.
- 574 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.
- 575 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

- 581 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.
- 582 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

- 591 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

Except where otherwise specified, all Special Conditions of Contract should be filled in by the Procuring Entity prior to issuance of the bidding document. Schedules and reports to be provided by the Procuring Entity should be annexed.

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
A. General	
GCC 1.1 (q)	The Procuring Entity is <i>[insert name, address, and name of authorized representative]</i> .
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be <i>[insert date]</i> <i>[If different dates are specified for completion of the Works by section (“sectional completion” or milestones), these dates should be listed here]</i>
GCC 1.1 (x)	The Project Manager is <i>[insert name, address, and name of authorized representative]</i> .
GCC 1.1 (z)	The Site is located at <i>[insert address of Site]</i> and is defined in drawings No. <i>[insert numbers]</i>
GCC 1.1 (cc)	The Start Date shall be <i>[insert date]</i> .
GCC 1.1 (gg)	The Works consist of <i>[insert brief summary, including relationship to other contracts under the Project]</i> .
GCC 2.2	Sectional Completions are: <i>[insert nature and dates, if appropriate]</i>
GCC 5.1	The Project manager <i>[may or may not]</i> delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: <i>[insert Schedule of Other Contractors, if appropriate]</i>
GCC 9.1	Key Personnel GCC 9.1 is replaced with the following: 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. <i>[insert the name/s of each Key Personnel agreed by the Procuring Entity prior to Contract signature.]</i>
GCC 13.1	The minimum insurance amounts and deductibles shall be: (a) for loss or damage to the Works, Plant and Materials: <i>[insert amounts]</i>. (b) For loss or damage to Equipment: <i>[insert amounts]</i>. (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract <i>[insert amounts]</i>. (d) for personal injury or death: (i) of the Contractor’s employees: <i>[amount]</i>. (ii) of other people: <i>[amount]</i>.
GCC 14.1	Site Data are: <i>[list Site Data]</i>
GCC 20.1	The Site Possession Date(s) shall be: <i>[insert location(s) and date(s)]</i>

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 23.1 & GCC 23.2	Appointing Authority for the Adjudicator: <i>[insert name of Authority]</i> .
	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: <i>[insert hourly fees and reimbursable expenses]</i> .
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	The period between Program updates is <i>[insert number]</i> days.
	The amount to be withheld for late submission of an updated Program is <i>[insert amount]</i> .
C. Quality Control	
GCC 34.1	The Defects Liability Period is: <i>[insert number]</i> days.
	<i>[The Defects Liability Period is usually limited to 12 months, but could be less in very simple cases]</i>
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 ___% <i>(insert appropriate percentage. The percentage is normally up to 50%)</i> of the reduction in the Contract Price.
GCC 44.1	The currency of the Procuring Entity's Country is: <i>[insert name of currency of the Procuring Entity's Country]</i> .
GCC 45.1	The Contract <i>[insert "is" or "is not"]</i> subject to price adjustment in accordance with GCC Clause 45, and the following information regarding coefficients <i>[specify "does" or "does not"]</i> apply.
	<i>[Price adjustment is mandatory for contracts which provide for time of completion exceeding 18 months]</i> The coefficients for adjustment of prices are: (a) <i>[insert percentage]</i> percent nonadjustable element (coefficient A). (ib) <i>[insert percentage]</i> percent adjustable element (coefficient B). (c) The Index I for shall be <i>[insert index]</i> .
GCC 46.1	The proportion of payments retained is: <i>[insert percentage]</i>
	<i>[The retention amount is usually close to 5 percent and in no case exceeds 10 percent.]</i>
GCC 47.1	The liquidated damages for the whole of the Works are <i>[insert percentage of the final Contract Price]</i> per day. The maximum amount of liquidated damages for the whole of the Works is <i>[insert percentage]</i> of the final Contract Price.
	<i>[Usually liquidated damages are set between 0.05 percent and 0.10 percent per day, and the total amount is not to exceed between 5 percent and 10 percent of the Contract Price. If Sectional Completion and Damages per Section have been agreed, the latter should be specified here]</i>
GCC 48.1	The Bonus for the whole of the Works is <i>[insert percentage of final Contract Price]</i> per day. The maximum amount of Bonus for the whole of the Works is <i>[insert percentage]</i> of the final Contract Price.
	<i>[If early completion would provide benefits to the Procuring Entity, this clause should remain;</i>

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	<i>otherwise delete. The Bonus is usually numerically equal to the liquidated damages.]</i>
GCC 49.1	The Advance Payments shall be: <i>[insert amount(s)]</i> and shall be paid to the Contractor no later than <i>[insert date(s)]</i> .
GCC 50.1	The Performance Security amount is <i>[insert amount(s) denominated in the types and proportions of the currencies in which the Contract Price is payable, or in a freely convertible currency acceptable to the Procuring Entity]</i> (a) Performance Security – Bank Guarantee: in the amount(s) of <i>[insert related figure(s)]</i> percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount. (b) Performance Security – Performance Bond: in the amount(s) of <i>[insert related figure(s)]</i> percent 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 <i>[insert date]</i>. The date by which “as built” drawings are required is <i>[insert date]</i>.
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>[insert amount in local currency]</i> .
GCC 57.2 (g)	The maximum number of days is: <i>[insert number; consistent with Clause 47.1 on liquidated damages]</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, is <i>[insert percentage]</i> .

FORM No 1: NOTIFICATION OF INTENTION TO AWARD

This Notification of Intention to Award shall be sent to each Tenderer that submitted a Tender. Send this Notification to the Tenderer's Authorized Representative named in the Tender Information Form on the format below.

FORMAT

1. For the attention of Tenderer's Authorized Representative

- i) Name: *[insert Authorized Representative's name]*
- ii) Address: *[insert Authorized Representative's Address]*
- iii) Telephone: *[insert Authorized Representative's telephone/fax numbers]*
- iv) Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to Tenderers. The Notification must be sent to all Tenderers simultaneously. This means on the same date and as close to the same time as possible.]

2. Date of transmission: *[email]* on *[date]* (local time)

This Notification is sent by (Name and designation) _____

3. Notification of Intention to Award

- i) Procuring Entity: *[insert the name of the Procuring Entity]*
- ii) Project: *[insert name of project]*
- iii) Contract title: *[insert the name of the contract]*
- iv) Country: *[insert country where ITT is issued]*
- v) ITT No: *[insert ITT reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:

4. Request a debriefing in relation to the evaluation of your tender

Submit a Procurement-related Complaint in relation to the decision to award the contract.

a) The successful tenderer

- i) Name of successful Tender _____
- ii) Address of the successful Tender _____
- iii) Contract price of the successful Tender Kenya Shillings _____ (in words _____)

b) Other Tenderers

Names of all Tenderers that submitted a Tender. If the Tender's price was evaluated include the evaluated price as well as the Tender price as read out. For Tenders not evaluated, give one main reason the Tender was unsuccessful.

SNo	Name of Tender	Tender Price as read out	Tender's evaluated price (Note a)	One Reason Why not Evaluated
1				
2				
3				
4				
5				

(Note a) State NE if not evaluated

5. How to request a debriefing

- a) DEADLINE: The deadline to request a debriefing expires at midnight on *[insert date]* (local time).
- b) You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (5) Business Days of receipt of this Notification of Intention to Award.
- c) Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:
 - i) Attention: *[insert full name of person, if applicable]*
 - ii) Title/position: *[insert title/position]*
 - ii) Agency: *[insert name of Procuring Entity]*
 - iii) Email address: *[insert emailaddress]*
- d) If your request for a debriefing is received within the 3 Days deadline, we will provide the debriefing within five (3) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (3) Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.
- e) The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.
- f) If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Days from the date of publication of the Contract Award Notice.

6. How to make a complaint

- a) Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, *[insert date]* (local time).
- b) Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement-related Complaint as follows:
 - i) Attention: *[insert full name of person, if applicable]*
 - ii) Title/position: *[insert title/position]*
 - iii) Agency: *[insert name of Procuring Entity]*
 - iv) Email address: *[insert emailaddress]*
- c) At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.
- d) Further information: For more information refer to the Public Procurement and Disposals Act 2015 and its Regulations available from the Website info@ppra.go.ke or complaints@ppra.go.ke.
You should read these documents before preparing and submitting your complaint.
- e) There are four essential requirements:
 - i) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.

ii) The complaint can only challenge the decision to award the contract.

iii) You must submit the complaint within the period stated above.

iv) You must include, in your complaint, all of the information required to support your complaint.

7. Standstill Period

i) DEADLINE: The Standstill Period is due to end at midnight on [*insert date*] (local time).

ii) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.

iii) The Standstill Period may be extended as stated in paragraph Section 5 (d) above.

If you have any questions regarding this Notification please do not hesitate to contact us. On behalf of the Procuring Entity:

Signature: _____ Name: _____

Title/position: _____ Telephone: _____ Email: _____

FORM NO. 2 - REQUEST FOR REVIEW

FORM FOR REVIEW(r.203(1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO.....OF.....20.....

BETWEEN

..... APPLICANT

AND

..... RESPONDENT (Procuring Entity)

Request for review of the decision of the..... (Name of the Procuring Entity ofdated the...day of20.....in the matter of Tender No.....of20..... for..... (Tender description).

REQUEST FOR REVIEW

I/We.....,the above named Applicant(s), of address: Physical address.....P. O. Box No.....Tel. No.....Email, hereby request the Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds , namely:

- 1.
- 2.

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

- 1.
- 2.

SIGNED(Applicant) Dated on.....day of/...20.....

FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board on.....day of20.....

SIGNED

Board Secretary

FORM NO 3: LETTER OF AWARD

[letterhead paper of the Procuring Entity] [date]

To: *[name and address of the Contractor]*

This is to notify you that your Tender dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Contract Data]* for the Accepted Contract Amount *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by..... *(name of Procuring Entity)*.

You are requested to furnish the Performance Security within 30 days in accordance with the Conditions of Contract, using, for that purpose, one of the Performance Security Forms included in Section VIII, Contract Forms, of the Tender Document.

Authorized Signature:.....

Name and Title of Signatory:.....

Name of Procuring Entity.....

Attachment: *Contract Agreement*.....

FORM NO 4: CONTRACT AGREEMENT

THIS AGREEMENT made the _____ day of _____, 20____, between _____ of _____ (hereinafter “the Procuring Entity”), of the one part, and _____ of _____ (hereinafter “the Contractor”), of the other part:

WHEREAS the Procuring Entity desires that the Works known as _____ should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Procuring Entity and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - a) the Letter of Acceptance
 - b) the Letter of Tender
 - c) the addenda Nos _____ (if any)
 - d) the Special Conditions of Contract
 - e) the General Conditions of Contract;
 - f) the Specifications
 - g) the Drawings; and
 - h) the completed Schedules and any other documents forming part of the contract.
3. In consideration of the payments to be made by the Procuring Entity to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Procuring Entity to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Procuring Entity hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the Laws of Kenya on the day, month and year specified above.

Signed and sealed by _____ (for the Procuring Entity)

Signed and sealed by _____ (for the Contractor).

FORM NO. 5 - PERFORMANCE SECURITY

[Option 1 - Unconditional Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ *[insert name and Address of Procuring Entity]* **Date:** _____

_____ *[Insert date of issue]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that _____ (hereinafter called "the Contractor") has entered into Contract No. _____ dated _____ with (name of Procuring Entity) _____ (the Procuring Entity as the Beneficiary), for the execution of _____ (hereinafter called "the Contract").
2. Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (in words),¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.
4. This guarantee shall expire, no later than the Day of, 2.....², and any demand for payment under it must be received by us at the office indicated above on or before that date.
5. The Guarantor agrees to a one-time extension of this guarantee for a period notto exceed *[six months]* *[oneyear]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

[Name of Authorized Official, signature(s) and seals/stamps].

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

¹The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency of the Contract or a freely convertible currency acceptable to the Beneficiary.

²Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM No. 6 - PERFORMANCE SECURITY

[Option 2– Performance Bond]

[Note: Procuring Entities are advised to use Performance Security – Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bondholder to action]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ *[insert name and Address of Procuring Entity]* **Date:** _____
_____ *[Insert date of issue]*.

PERFORMANCE BOND No.: _____

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. By this Bond _____ as Principal (hereinafter called “the Contractor”) and _____] as Surety (hereinafter called “the Surety”), are held and firmly bound unto _____] as Obligee (hereinafter called “the Procuring Entity”) in the amount of _____ for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
2. WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the _____ day of _____, 20 , for _____ in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.
3. NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:
 - 1) complete the Contract in accordance with its terms and conditions; or
 - 2) obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term “Balance of the Contract Price,” as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or
 - 3) pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.
4. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.
5. Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named herein or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.
6. In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this day _____ of _____ 20 _____.

SIGNED ON _____ on behalf of By _____ in the capacity of _____ In the presence of _____

SIGNED ON _____ on behalf of By _____ in the capacity of _____ In the presence of _____

FORM NO. 7 - ADVANCE PAYMENT SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ *[Insert name and Address of Procuring Entity]*

Date: _____ *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: _____ *[Insert guarantee reference number]* **Guarantor:** _

_____ *[Insert name and address of place of issue, unless indicated in the letterhead]*

1. We have been informed that _____ (hereinafter called "the Contractor") has entered into Contract No. _____ dated _____ with the Beneficiary, for the execution of _____ (hereinafter called "the Contract").
2. Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum _____ (in words) is to be made against an advance payment guarantee.
3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (in words _____)¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:
 - a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
 - b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.
4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Contractor on its account number _____ at _____.
5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the ____ day of _____, 2,² whichever is earlier. Consequently, a demand for payment under this guarantee must be received by us at this office on or before that date.
6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months]* *[one year]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps]

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

¹The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency of the advance payment as specified in the Contract.

²Insert the expected expiration date of the Time for Completion. The Procuring Entity should note that in the event of an extension of the time for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM NO. 8 - RETENTION MONEY SECURITY

[Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____[Insert name and Address of Procuring Entity]

Date: _____[Insert date of issue]

Advance payment guarantee no. [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

1. We have been informed that _____[insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Contractor") has entered into Contract No. _____[insert reference number of the contract] dated _____with the Beneficiary, for the execution of _____[insert name of contract and brief description of Works] (hereinafter called "the Contract").
2. Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of [insert the second half of the Retention Money] is to be made against a Retention Money guarantee.
3. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] _____([insert amount in words _____])¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.
4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Contractor on its account number _____at _____[insert name and address of Applicant's bank].
5. This guarantee shall expire no later than the Day of, 2.....², and any demand for payment under it must be received by us at the office indicated above on or before that date.
6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

[Name of Authorized Official, signature(s) and seals/stamps]

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

¹The Guarantor shall insert an amount representing the amount of the second half of the Retention Money.

²Insert a date that is twenty-eight days after the expiry of retention period after the actual completion date of the contract. The Procuring Entity should note that in the event of an extension of this date for completion of the Contract, the Procuring Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM
(Amended and issued pursuant to PPRA CIRCULAR No. 02/2022)

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer pursuant to Regulation 13 (2A) and 13 (6) of the Companies (Beneficial Ownership Information) Regulations, 2020. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the legal person (tenderer) or arrangements or a natural person on whose behalf a transaction is conducted, and includes those persons who exercise ultimate effective control over a legal person (Tenderer) or arrangement.

Tender Reference No.: _____ [insert identification no]

Name of the Tender Title/Description: _____ [insert name of the assignment] to:
 _____ [insert complete name of Procuring Entity]

In response to the requirement in your notification of award dated _____ [insert date of notification of award] to furnish additional information on beneficial ownership: _____ [select one option as applicable and delete the options that are not applicable]

I) We hereby provide the following beneficial ownership information.

Details of beneficial ownership

	Details of all Beneficial Owners		% of shares a person holds in the company Directly or indirectly	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes / No)	Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)
1.	Full Name		Directly----- ----- % of shares	Directly.....% of voting rights	1. Having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer: Yes -----No----- 2. Is this right held directly or indirectly?: Direct..... ... Indirect.....	1. Exercises significant influence or control over the Company body of the Company (tenderer) Yes -----No----- 2. Is this influence or control exercised directly or indirectly? Direct.....
	National identity card number or Passport number					
	Personal Identification Number (where applicable)		Indirectly---- -----% of shares	Indirectly----- % of voting rights		
	Nationality					
	Date of birth [dd/mm/yyyy]					
	Postal address					
	Residential address					
Telephone number						

Details of all Beneficial Owners		% of shares a person holds in the company Directly or indirectly	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes / No)	Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)	
	Email address				Indirect.....	
	Occupation or profession					
2.	Full Name		Directly----- ----- % of shares	Directly.....% of voting rights	1. Having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer: Yes -----No---- 2. Is this right held directly or indirectly?: Direct..... ... Indirect.....	
	National identity card number or Passport number		Indirectly---- - -----% of shares	Indirectly----- % of voting rights		1. Exercises significant influence or control over the Company body of the Company (tenderer) Yes -----No---- 2. Is this influence or control exercised directly or indirectly? Direct..... Indirect.....
	Personal Identification Number (where applicable)					
	Nationality(ies)					
	Date of birth [dd/mm/yyyy]					
	Postal address					
	Residential address					
	Telephone number					
	Email address					
	Occupation or profession					
3. e.t .c						

II) Am fully aware that beneficial ownership information above shall be reported to the Public Procurement Regulatory Authority together with other details in relation to contract awards and shall be maintained in the Government Portal, published and made publicly available pursuant to Regulation 13(5) of the Companies (Beneficial Ownership Information) Regulations, 2020.(Notwithstanding this paragraph Personally Identifiable Information in line with the Data Protection Act shall not be published or made public). *Note that Personally Identifiable Information (PII) is defined as any information that can be used to distinguish one person from another and can be used to deanonymize previously anonymous data. This information includes National identity card number or Passport number, Personal Identification Number, Date of birth, Residential address, email address and Telephone number.*

III) In determining who meets the threshold of who a beneficial owner is, the Tenderer must consider a natural person who in relation to the company:

(a) holds at least ten percent of the issued shares in the company either directly or indirectly;

- (b) exercises at least ten percent of the voting rights in the company either directly or indirectly;
- (c) holds a right, directly or indirectly, to appoint or remove a director of the company; or
- (d) exercises significant influence or control, directly or indirectly, over the company.

IV) What is stated to herein above is true to the best of my knowledge, information and belief.

*Name of the Tenderer *[insert complete name of the Tenderer]_____*

*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]*

Designation 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 this [insert date of signing] day of.....[Insert month], [insert year]

Bidder Official Stamp

BILL OF QUANTITIES

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 1 (NEW CLASS AT SENIOR POLYTECHNIC)</u> <u>BUILDER'S WORK</u> <u>ELEMENT NO.1</u> <u>SUBSTRUCTURES</u> <u>(ALL PROVISIONAL)</u> NOTE; (I) All work measured under this element is up to and including the floor slab but excluding the finishes thereon.				
A	Clear the site of all bush scrub undergrowth and small trees grab up roots and cart away or burn all arising	102	SM		
	<u>Excavations and earthworks</u>				
B	Excavate oversite average 200mm deep to remove vegetable soil load up wheel and deposit about 100metres away and later spread and level on site where directed	102	SM		
C	Bulk Excavate to reduce levels not exceeding 1.50 metres deep commencing at stripped level	31	CM		
D	Excavate for strip foundation trenches occurring not exceeding 1.5metres deep commencing from reduced level	25	CM		
E	Allow for keeping excavations free from mud and all water including spring and running water by pumping pailing or other approved means.		ITEM		
F	Allow for planking and strutting to sides of excavations		ITEM		
	<u>Disposal</u>				
G	Load surplus excavated material and spread on site	15	CM		
	<u>Filling</u>				
H	Return fill and ram selected excavated material around foundations.	10	CM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Hardcore as described</u>				
A	300mm Thick layer of imported hardcore filling including levelling and consolidating in 150mm layers	87	SM		
B	Imported Murram filling including levelling and consolidating in 150mm layers	30	CM		
	<u>Blinding</u>				
C	50mm Thick Quarry dust blinding to the surface of hardcore;rolled smooth to receive polythene sheeting(m.s)	87	SM		
	<u>Insecticide treatment</u>				
D	"TERMIDOL" or other equal and approved chemical insecticide treatment prepared and applied according to the manufacturer's printed instructions.	87	SM		
	<u>Damp proof membrane</u>				
E	500 Gauge polythene or other equal and approved plastic sheet damp proof membrane laid over blinding(measured nett - allow for laps)	87	SM		
	<u>In-situ concrete work</u>				
	<u>Mass concrete (1:3:6/38-38mm aggregate)</u>				
F	50mm Thick blinding under strip foundations	20	SM		
	<u>Vibrated reinforced concrete (1:2:4/20-20mm aggregate) as described in:</u>				
G	Strip foundations	4	CM		
H	100 mm Thick ground floor slab	87	SM		
	<u>Steel reinforcement</u>				
	<u>Supply and fix bars reinforcement including bending, hooks, tyingwire, cutting, spacer blocks and supporting all in position as described</u>				
	<u>High tensile square twisted bars to B.S. 4461</u>				
J	8 mm Diameter	134	KG.		
K	10 mm Diameter	132	KG.		
	<u>Mesh reinforcement</u>				
L	Fabric mesh reinforcement to B.S. 4483 ref: A142 including laps tyingwire and spacer blocks complete(measured nett-allow for laps)	87	SM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Sawn formwork as described to:</u>				
A	Vertical sides of strip foundations	17	SM		
B	Edge of floor slab 75-150mm high	38	LM		
	<u>Foundation walling</u>				
C	200mm Thick rough chisel dressed natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron in every alternate course	56	SM		
	<u>Plinth area finishes</u>				
D	12mm Thick cement and sand (1:3) wood float render to plinth area	11	SM		
E	Prepare and apply three coats black bitumastic paint to rendered area	11	SM		
	<i>Carried to collection</i>	<i>below</i>			
	<u>COLLECTION</u>				
	Brought Forward from Page No. BW		1		
	Brought Forward from Page No. BW		2		
	Brought Down from Page No. BW		Above		
	<u>TOTAL FOR ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUPERSTRUCTURE WORKS</u> <u>ELEMENT NO.2</u> <u>REINFORCED CONCRETE</u> <u>FRAME (ALL PROVISIONAL)</u> <u>Vibrated reinforced concrete (1:2:4/20 - 20mm aggregate) as described in:-</u>				
A	Beam	2	CM		
	<u>Steel reinforcement</u> <u>Supply and fix bars reinforcement including bending, hooks, tyingwire, cutting, spacer blocks and supporting all in position as described</u> <u>High tensile square twisted bars to B.S. 4461 as described in ;</u>				
B	8 mm Diameter	70	KG.		
C	12 mm Diameter	121	KG.		
	<u>Sawn formwork as described to ;</u>				
D	Sides and soffits of ringbeam/beams	20	SM		
	<u>TOTAL FOR ELEMENT NO. 2</u> <u>R.C. SUPERSTRUCTURE</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u> <u>WALLING</u> <u>Fine machine cut natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron; with horizontal external keys externally; internally left plain ready for plaster (m.s)</u>				
A	200mm Thick External wall reinforced in every third course	72	SM		
B	200mm Thick Gable Wall	14	SM		
	<u>Horizontal damp proof course ; one layer of 3 - ply bituminous felt or other equal and approved (measured nett - allow for laps)</u>				
C	200mm Wide levelled and bedded in cement and sand (1:3) mortar under walls	34	LM		
	<u>Steel Columns</u> 75mm diameter x 3mm CHS mild steel columns anchored onto concrete at the bottom and to timber trusses at top with and including holder brackets each 3000mm high; primed painted in 3 coats gloss oil paint to approval	4	NO		
	<u>TOTAL FOR ELEMENT NO.3</u> <u>WALLING</u> CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO 2</u> <u>ROOFING AND RAIN WATER DISPOSAL</u> <u>All timber to be sawn cypress of G.S grade seasoned to an equilibrium moisture content between 9% and 15% and to a requirement of K.S 02771 of 1991 treated with approved wood preservative.</u>				
A	100 X 50mm Wall plate on and including 10mm cement and sand (1;4) mortar bed secured to reinforced concrete ring beam (m.s) by mild steel anchor bolts (m.s)	19	LM		
	<u>The following in Nailed triangular timber trusses spanning clear 2000 mm height 400 mm including hoisting and placing approx. 3100 mm above floor slab level.</u>				
C	100 X 50 mm trussed rafter	80	LM		
D	100 X 50 mm Struts / ties	137	LM		
E	100 X 50 mm Tie Beam	66	LM		
F	75 X50 mm purlins	129	LM		
	<u>Covering</u> <u>Approved gauge 30 IT5 roofing sheets laid onto and including 50 x 75 celcured treated cypress battens (m.s) - at approved centres:</u>				
G	Laid in approved pattern; including raking cutting	110	SM		
H	Gauge 30 ridge cap on gauge 30 IT5 roofing sheets nailed on purlins	9	LM		
	<u>Wrot cypress</u>				
J	25 X200 mm Thick Fascia and Barge boards fixed to ends of rafters(m.s)	48	LM		
	Carried to collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Rain Water disposal</u> <u>The following in G24 Galvanised mild steel</u>				
A	150 X 100 mm Half round gutter fixed to fascia board with and including approved pattern brackets at 1000 mm cc	20	LM		
B	Extra over gutter for stopped end piece with 100 mm diameter outlet	4	NO		
C	100 diameter x 3 mm Thick cold rolled steel pipe fixed to natural stone walling with and including mild steel brackets 600mm centres	12	LM		
D	Extra over down pipe for 100 mm diameter swan neck wall off set	4	NO		
E	Extra over down pipe for 100 mm diameter rain water shoe	4	NO		
	<u>Painting</u>				
	<u>Knot prime stop and prepare and apply one under coat and two finishing coats of gloss oil paint to;</u>				
F	General surfaces of timber fascia 200 - 300mm girth	48	LM		
	Carried to collection				
	<u>COLLECTION</u> Brought Forward from Page No. BW Brought Down from		5 6 Above		
	TOTAL FOR ELEMENT NO. 2 <u>ROOFING AND RAINWATER DISPOSAL</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u>				
	<u>WALL FINISHES</u>				
	<u>EXTERNAL WALL FINISHES</u>				
	12mm thick cement,sand render,with wood float finish , as described to:-				
A	Concrete or masonry surfaces of gables,parapets, columns and beam	97	SM		
	<u>Painting and decorations</u> <u>Prepare and apply one undercoat and two finishing coats "Permacoat" or equivalent exterior quality emulsion paint on:-</u>				
B	Fair faced surfaces of rendered concrete or masonry surfaces	97	SM		
	<u>INTERNAL WALL FINISHES</u> <u>(ALL PROVISIONAL)</u> <u>Internal wall finishes</u>				
C	Hack out joints and apply 12mm thick gauged lime plaster (1:2:9) in two coats finished with steel trowel on natural stone walling and beams	83	SM		
	<u>Painting and decorations</u> <u>Prepare and apply one undercoat and two finishing coats plastic Vinyl matt or equivalent emulsion paint on:-</u>				
D	Plastered surfaces	83	SM		
	<u>TOTAL FOR ELEMENT NO. 3</u> <u>WALL FINISHES</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 4				
	<u>FLOOR FINISHES</u>				
	<u>Insitu cement and sand (1:3) screeded beds ,with steel trowelled finish, on concrete verandah walkways</u>				
A	25 mm non -coloured screed	0	SM		
B	Ditto 25 x 100 mm high skirting	0	LM		
	<u>Insitu cement and sand (1:3) screeded beds ,with wood trowelled finish, on concrete</u>				
	<u>(Class floor)</u>				
D	25 mm screed to receive floor terrazzo floor finish (ms)	87	SM		
	<u>Terrazzo (1:3) with approved coloured chippings, ground and polished smooth, including approved plastic dividing strips and non slip carborandums on staircase treads and ramps:</u>				
E	15 mm thick paving in floors / steps	87	SM		
F	Ditto 100 mm high skirting	51	LM		
	<u>CEILING FINISHES</u>				
	<u>(ALL PROVISIONAL)</u>				
	<u>UPVC ceiling</u>				
G	Approved quality UPVC ceiling boards fixed to and including 50 x 50mm framing sections sawn cypress timber brandering at 600mm centers both ways.	87	SM		
H	<u>Extra over</u> UPVC ceiling board for forming removable access trap door size 600x600mm with 100 x 50mm sawn treated cypress trimming joists 120 x 25mm wrot cypress frame all round and 9mm removable chipboard panel set loose on top of framing	1	NO		
	<u>UPVC Cornice</u>				
J	100x 25mm PVC Moulded cornice	42	LM		
	<u>TOTAL FOR ELEMENT NO. 4</u>				
	<u>FLOOR & CEILING FINISHES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 5				
	<u>WINDOWS</u>				
A	175 x 75 mm thick precast concrete window; weathered and throated	9	LM		
	<u>Steel Casement Windows</u>				
	<u>Purpose made steel window casements in 25 mm thick z - sections, T-sections and flat bars; complete with hinges, stays, fasteners, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Burglar proofing grilles included)</u>				
B	Window Size 1500x1500mm high	5	NO		
	<u>GLASS & GLAZING TO METAL WITH PUTTY</u>				
	<u>Clear sheet Glass</u>				
C	4 mm thick clear and one way tinted in selected areas	11	SM		
	<u>Obscure sheet Glass</u>				
D	5 mm thick	0	SM		
	<u>Prepare and apply two undercoats and one finishing coat gloss oil paint to;</u>				
E	Steel window surfaces / grilles; measured generally	11	SM		
	<u>DOORS</u>				
	<u>(ALL PROVISIONAL)</u>				
	<u>Steel Casement Doors</u>				
	<u>Standard door complete with hinges, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Grille, 3 lever "Union" or approved equivalent steel lock and Glazing included)</u>				
F	Door Overall size 900 x 2400 mm high; Single door	1	NO		
F	Door Overall size 1200 x 2050 mm high; Double door	0	NO		
	<u>Prepare and Apply Three Coats of Gloss Oil Paint to:-</u>				
G	Steel door general surfaces	4	SM		
	<u>TOTAL FOR ELEMENT NO. 5</u>				
	<u>WINDOWS AND DOORS</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUMMARY	PAGE	NO		
1	SUBSTRUCTURES	BW	3		
2	REINFORCED CONCRETE FRAME	BW	4		
3	WALLING	BW	5		
4	ROOFING AND RAIN WATER DISPOSAL	BW	7		
5	WALL FINISHES	BW	8		
6	FLOOR & CEILING FINISHES	BW	9		
7	WINDOWS AND DOORS	BW	10		
	TOTAL FOR BILL NO. 1 (NEW CLASS AT SENIOR POLYTECHNIC CARRIED TO GRAND SUMMARY)				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 2</u> PIT LATRINE BLOCK (2 NO.DOOR+URINAL PIT LATRINE) AT SENIOR POLYTECHNIC BUILDER'S WORK <u>ELEMENT NO.1</u> <u>SUBSTRUCTURES</u> <u>(ALL PROVISIONAL)</u> NOTE;(1) All work measured under this element is up to and including the floor slab excluding the finishes thereon.				
A	Clear the site of all bush scrub undergrowth and small trees grab up roots and cart away or burn all arising (approx. area sq. sm)	0	SM		
	<u>EXCAVATIONS</u>				
B	Bulk, Excavate to reduce levels not exceeding 1.50 metres deep commencing at stripped level	0	CM		
C	Excavate for strip foundation trenches occurring not exceeding 1.5metres deep commencing from reduced level	4	CM		
D	Excavate pit not exceeding 1.5 metres deep commencing from existing ground level	5	CM		
E	Ditto exceeding 1.5 metres but not exceeding 3.0 metres deep	5	CM		
F	Ditto exceeding 3.0 metres but not exceeding 4.5 metres deep	5	CM		
G	Ditto exceeding 4.5 metres but not exceeding 6.0 metres deep	5	CM		
H	Ditto exceeding 6.0 metres but not exceeding 7.5 metres deep	5	CM		
J	Ditto exceeding 7.5 metres but not exceeding 9 metres deep	5	CM		
K	Ditto exceeding 9.0 metres but not exceeding 10.5 metres deep	0	CM		
L	Ditto exceeding 10.5 metres but not exceeding 12 metres deep	0	CM		
M	Cart away excavated material	30	CM		
N	Extra over excavations for excavating in rock	3	CM		
P	Allow for keeping excavations free from all water		ITEM		
Q	Allow for Planking and Strutting		ITEM		
	<u>Backfilling:</u>				
R	Backfill externally with approved murrum, well watered and compacted	4	CM		
	<u>Hardcore as described</u>				
S	300mm Thick layer of imported hardcore filling including levelling and consolidating in 150mm layers	10	SM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<u>Blinding</u> 50mm Thick Quarry dust blinding to the surface of hardcore;rolled smooth to receive polythene sheeting(m.s)	10	SM		
B	<u>Insecticide treatment</u> "TERMIDOL" or other equal and approved chemical insecticide treatment prepared and applied according to the manufacturer's printed instructions.	10	SM		
C	<u>Damp proof membrane</u> 500 Gauge polythene or other equal and approved plastic sheet damp proof membrane laid over blinding(measured nett - allow for laps)	10	SM		
D	<u>Backfilling:</u> Backfill externally with approved murrum, well watered and compacted	0	CM		
E	<u>In-situ concrete work</u> <u>Mass concrete (1:3:6/38-38mm aggregate)</u> 50mm Thick blinding under strip foundations	4	SM		
F	50mm Thick blinding under Column Bases	0	SM		
G	<u>Vibrated reinforced concrete</u> <u>(1:2:4/20-20mm aggregate) as described in:</u> Strip foundations	1	CM		
H	Column Bases	0	CM		
J	Columns	0	CM		
K	Ground Beams	1	CM		
L	150 mm thick Suspended Floor slab/bed slab	0	SM		
M	100mm Thick Floor slab	12	SM		
N	<u>Steel reinforcement</u> <u>Supply and fix bars reinforcement</u> <u>including bending, hooks, tyingwire, cutting</u> <u>spacers and supporting all in position as described</u> <u>High tensile square twisted bars to B.S. 4461</u> Assorted 8 - 16 mm Diameter	0	KG		
P	8 mm Diameter	32	KG		
Q	10 mm Diameter	64	KG		
R	12 mm Diameter	45	KG		
S	16 mm Diameter	0	KG		
T	<u>Mesh reinforcement</u> Fabric mesh reinforcement to B.S. 4483 ref: A142 including laps tyingwire and spacer blocks complete(measured nett-allow for laps)	20	SM		
U	<u>Sawn formwork as described to :</u> Vertical sides of strip foundations	0	SM		
V	Vertical sides of Column bases	0	SM		
W	Vertical sides of Columns	0	SM		
X	Vertical sides of Ground Beams	6	SM		
Y	Soffits of slab	20	SM		
Z	Edges of slab 75-150mm girth high	14	LM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Masonry block walling in cement and sand (1:4) mortar</u>				
A	200mm masonry block walling	12	SM		
B	150mm masonry block walling	8	SM		
C	Extra over formwork for boxing to form 150 x 270mm opening through 150mm thick floor slab	2	NO		
	<u>Internal wall finishes</u>				
D	Hack out joints and apply 12mm thick gauged lime plaster (1:2:9) in two coats finished with steel trowel on natural stone walling and beams	0	SM		
	<u>Plinth area finishes</u>				
E	12mm Thick cement and sand (1:3) wood float render to plinth area	4	SM		
F	Prepare and apply three coats black bitumastic paint to rendered area	4	SM		
	<i>Carried to collection</i>	<i>below</i>			
	<u>COLLECTION</u>				
	Brought Forward from Page No. BW		12		
	Brought Forward from Page No. BW		13		
	Brought Forward from Page No. BW		Above		
	<u>TOTAL FOR ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO.2</u> <u>REINFORCED CONCRETE</u> <u>FRAME (ALL PROVISIONAL)</u> <u>Vibrated reinforced concrete</u> <u>(1:2:4/20 - 20mm aggregate) as</u> <u>described in:-</u> A Ring Beam 1 CM <u>Steel reinforcement</u> <u>Supply and fix steel bars</u> <u>reinforcement including bending,</u> <u>hooks, tying wire, cutting, spacer</u> <u>blocks and supporting all in</u> <u>position</u> <u>High tensile square twisted bars to</u> <u>B.S. 4461 as described in ;</u> B Assorted 8 - 16 mm Diameter 0 KG. C 8 mm Diameter 26 KG. D 12 mm Diameter 38 KG. <u>Sawn formwork as described to ;</u> E Sides and soffits of ringbeam/beams 6 SM				
	<u>TOTAL FOR ELEMENT NO. 2</u> <u>R.C. SUPERSTRUCTURE</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO 4</u> <u>ROOFING AND RAIN WATER DISPOSAL</u> <u>(ALL PROVISIONAL)</u> <u>All timber to be sawn cypress of G.S grade seasoned to an equilibrium moisture content between 9%and 15% and to a requirement of K.S 02771 of 1991 treated with approved wood preservative.</u>				
A	100 x 50mm rafters	10	LM		
B	100 x 50mm Struts and Ties/King Post	0	LM		
C	100 x 50mm wallplate	7	LM		
D	100 x 50mm tie beam	0	LM		
E	75 x 50mm purlins	14	LM		
	<u>Roof covering</u> <u>Approved gauge 30 IT5 roofing sheets laid onto and including 50 x 75 celcured treated cypress battens (m.s) - at approved centres;</u>				
F	Laid in approved pattern; including raking cutting	16	SM		
G	Approved ridge cap	0	LM		
	<u>Wrot cypress, prime grade</u>				
H	200 x 25mm thick fascia and barge board	12	LM		
	<u>Painting and Decorating</u>				
	<u>Prepare and Apply Three coats of Gloss Oil Paint to:-</u>				
J	Fascias; 200 to 300mm girth; external	12	LM		
	<u>Vent pipe</u>				
K	150mm diameter PVC pipe fixed to walling with and including holderbats at 1.0 metres centres	3	LM		
L	Extra over ditto for wire ballon grating	1	NO		
	<u>TOTAL FOR ELEMENT NO. 4</u> <u>ROOFING AND RAINWATER DISPOSAL</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 6</u> <u>WINDOWS</u> <u>(ALL PROVISIONAL)</u> <u>In situ concrete class 20 window cill once rebated and throated fairfaced all exposed surfaces</u>				
A	200 × 20 mm thick window cill	0	LM		
B	Prepare and apply three coats plastic emulsion paint on Ditto girth over 200mm but n.e 300mm girth <u>Steel Casement windows</u> <u>Supply and fix the following Standard steel casement windows with one coat lead oxide primer complete with opening accessories, standard pressed metal permanent vent filled with non-corroding metal mosquito gauze and sheet metal hood etc including cutting and pinning fixing lugs to walling and bedding frame in cement and sand mortar (1:4):-</u>	0	LM		
C	Window grilles size 450 × 450 mm high <u>Prepare and apply two undercoats and one finishing coat gloss oil paint to:-</u>	0	NO		
D	Steel window grilles (measured generally)	0	SM		
	<u>TOTAL FOR ELEMENT NO. 6</u> <u>WINDOWS</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7</u>				
	<u>FINISHES</u> (ALL PROVISIONAL)				
	<u>External wall finishes</u>				
	12mm thick cement,sand render,with wood float finish , as described to:-				
A	Concrete surfaces of gables, walls and beams	10	SM		
B	Masonry wall surfaces	0	SM		
	<u>Painting and decorations</u>				
	<u>Prepare and apply one undercoat and two finishing coats "Permacoat" or equivalent exterior quality emulsion paint on:-</u>				
C	Fair faced surfaces of concrete beams and columns	10	SM		
D	Fair faced surfaces of Masonry walling	0	SM		
	<u>Internal wall finishes</u>				
E	Hack out joints and apply 12mm thick gauged lime plaster (1:2:9) in two coats finished with steel trowel on natural stone walling and beams	42	SM		
F	10mm Thick cement and sand (1:4) screed finished to receive glazed tiling	0	SM		
	<u>300 x 300 x 8 mm Thick coloured glazed ceramic wall tiles as "Saj" or equal and approved manufacturer jointed and pointed with matching white cement .</u>				
G	Tiling on walls, including 150 mm wide matching dividing strip; and rounding on all edges with and including chrome edge strips	0	SM		
	<u>Painting and decorations</u>				
	<u>Prepare and apply one undercoat and two finishing coats plastic Vinyl matt or equivalent emulsion paint on:-</u>				
H	Plastered surfaces	42	SM		
	<u>Floor Finishes</u>				
	<u>Insitu cement and sand (1:3) screeded beds ,with steel trowelled finish, on concrete</u>				
J	25 mm non- coloured screed finished roughly to receive ceramic tiles	12	SM		
	<u>300 x 300x 6mm Thick floor "TWYFORD" or equivalent ceramic floor tiles jointed and pointed with matching white cement</u>				
G	Tiling	12	SM		
H	150mm high raisers	0	LM		
J	Ditto 100 mm high skirting	5	LM		
L	Concrete class Q as described in foot rest 250 x 150 x 50mm high with rounded edges all finished with wood float including all necessary formwork	2	NO		
	<u>TOTAL FOR ELEMENT NO. 7</u>				
	<u>FINISHES</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>BILL NO. 3 (NEW CLASS AT MANGOTO ECDE CENTRE)</u>				
	<u>BUILDER'S WORK</u>				
	<u>ELEMENT NO.1</u>				
	<u>SUBSTRUCTURES</u>				
	<u>(ALL PROVISIONAL)</u>				
	NOTE; (I) All work measured under this element is up to and including the floor slab but excluding the finishes thereon.				
A	Clear the site of all bush scrub undergrowth and small trees grab up roots and cart away or burn all arising	102	SM		
	<u>Excavations and earthworks</u>				
B	Excavate oversite average 200mm deep to remove vegetable soil load up wheel and deposit about 100metres away and later spread and level on site where directed	102	SM		
C	Bulk Excavate to reduce levels not exceeding 1.50 metres deep commencing at stripped level	31	CM		
D	Excavate for strip foundation trenches occurring not exceeding 1.5metres deep commencing from reduced level	25	CM		
E	Allow for keeping excavations free from mud and all water including spring and running water by pumping pailing or other approved means.		ITEM		
F	Allow for planking and strutting to sides of excavations		ITEM		
	<u>Disposal</u>				
G	Load surplus excavated material and spread on site	15	CM		
	<u>Filling</u>				
H	Return fill and ram selected excavated material around foundations.	10	CM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Hardcore as described</u>				
A	300mm Thick layer of imported hardcore filling including levelling and consolidating in 150mm layers	87	SM		
B	Imported Murram filling including levelling and consolidating in 150mm layers	30	CM		
	<u>Blinding</u>				
C	50mm Thick Quarry dust blinding to the surface of hardcore;rolled smooth to receive polythene sheeting(m.s)	87	SM		
	<u>Insecticide treatment</u>				
D	"TERMIDOL" or other equal and approved chemical insecticide treatment prepared and applied according to the manufacturer's printed instructions.	87	SM		
	<u>Damp proof membrane</u>				
E	500 Gauge polythene or other equal and approved plastic sheet damp proof membrane laid over blinding(measured nett - allow for laps)	87	SM		
	<u>In-situ concrete work</u>				
	<u>Mass concrete (1:3:6/38-38mm aggregate)</u>				
F	50mm Thick blinding under strip foundations	20	SM		
	<u>Vibrated reinforced concrete (1:2:4/20-20mm aggregate) as described in:</u>				
G	Strip foundations	4	CM		
H	100 mm Thick ground floor slab	87	SM		
	<u>Steel reinforcement</u>				
	<u>Supply and fix bars reinforcement including bending, hooks, tyingwire, cutting, spacer blocks and supporting all in position as described</u>				
	<u>High tensile square twisted bars to B.S. 4461</u>				
J	8 mm Diameter	134	KG.		
K	10 mm Diameter	132	KG.		
	<u>Mesh reinforcement</u>				
L	Fabric mesh reinforcement to B.S. 4483 ref: A142 including laps tyingwire and spacer blocks complete(measured nett-allow for laps)	87	SM		
	Carried to Collections				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Sawn formwork as described to:</u>				
A	Vertical sides of strip foundations	17	SM		
B	Edge of floor slab 75-150mm high	38	LM		
	<u>Foundation walling</u>				
C	200mm Thick rough chisel dressed natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron in every alternate course	56	SM		
	<u>Plinth area finishes</u>				
D	12mm Thick cement and sand (1:3) wood float render to plinth area	11	SM		
E	Prepare and apply three coats black bitumastic paint to rendered area	11	SM		
	<i>Carried to collection</i>	<i>below</i>			
	<u>COLLECTION</u>				
	Brought Forward from Page No. BW		22		
	Brought Forward from Page No. BW		23		
	Brought Down from Page No. BW		Above		
	<u>TOTAL FOR ELEMENT NO. 1</u>				
	<u>SUBSTRUCTURES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUPERSTRUCTURE WORKS</u> <u>ELEMENT NO.2</u> <u>REINFORCED CONCRETE</u> <u>FRAME (ALL PROVISIONAL)</u> <u>Vibrated reinforced concrete (1:2:4/20 - 20mm aggregate) as described in:-</u>				
A	Beam	2	CM		
	<u>Steel reinforcement</u> <u>Supply and fix bars reinforcement including bending, hooks, tyingwire, cutting, spacer blocks and supporting all in position as described</u> <u>High tensile square twisted bars to B.S. 4461 as described in ;</u>				
B	8 mm Diameter	70	KG.		
C	12 mm Diameter	121	KG.		
	<u>Sawn formwork as described to ;</u>				
D	Sides and soffits of ringbeam/beams	20	SM		
	<u>TOTAL FOR ELEMENT NO. 2</u> <u>R.C. SUPERSTRUCTURE</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 3</u> <u>WALLING</u> <u>Fine machine cut natural stone walling bedded and jointed in cement and sand (1:3) mortar and reinforced with and including 20swg x 25mm wide hoopiron; with horizontal external keys externally; internally left plain ready for plaster (m.s)</u>				
A	200mm Thick External wall reinforced in every third course	72	SM		
B	200mm Thick Gable Wall	14	SM		
	<u>Horizontal damp proof course ; one layer of 3 - ply bituminous felt or other equal and approved (measured nett - allow for laps)</u>				
C	200mm Wide levelled and bedded in cement and sand (1:3) mortar under walls	34	LM		
	<u>Steel Columns</u> 75mm diameter x 3mm CHS mild steel columns anchored onto concrete at the bottom and to timber trusses at top with and including holder brackets each 3000mm high; primed painted in 3 coats gloss oil paint to approval	4	NO		
	<u>TOTAL FOR ELEMENT NO.3</u> <u>WALLING</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO 4</u>				
	<u>ROOFING AND RAIN WATER DISPOSAL</u>				
	<u>All timber to be sawn cypress of G.S grade seasoned to an equilibrium moisture content between 9% and 15% and to a requirement of K.S 02771 of 1991 treated with approved wood preservative.</u>				
A	100 X 50mm Wall plate on and including 10mm cement and sand (1;4) mortar bed secured to reinforced concrete ring beam (m.s) by mild steel anchor bolts (m.s)	19	LM		
	<u>The following in Nailed triangular timber trusses spanning clear 2000 mm height 400 mm including hoisting and placing approx. 3100 mm above floor slab level.</u>				
C	100 X 50 mm trussed rafter	80	LM		
D	100 X 50 mm Struts / ties	137	LM		
E	100 X 50 mm Tie Beam	66	LM		
F	75 X50 mm purlins	129	LM		
	<u>Covering</u>				
	<u>Approved gauge 30 IT5 roofing sheets laid onto and including 50 x 75 celcured treated cypress battens (m.s) - at approved centres:</u>				
G	Laid in approved pattern; including raking cutting	110	SM		
H	Gauge 30 ridge cap on gauge 30 IT5 roofing sheets nailed on purlins	9	LM		
	<u>Wrot cypress</u>				
J	25 X200 mm Thick Fascia and Barge boards fixed to ends of rafters(m.s)	48	LM		
	Carried to collection				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Rain Water disposal</u> <u>The following in G24 Galvanised mild steel</u>				
A	150 X 100 mm Half round gutter fixed to fascia board with and including approved pattern brackets at 1000 mm cc	20	LM		
B	Extra over gutter for stopped end piece with 100 mm diameter outlet	4	NO		
C	100 diameter x 3 mm Thick cold rolled steel pipe fixed to natural stone walling with and including mild steel brackets 600mm centres	12	LM		
D	Extra over down pipe for 100 mm diameter swan neck wall off set	4	NO		
E	Extra over down pipe for 100 mm diameter rain water shoe	4	NO		
	<u>Painting</u> <u>Knot prime stop and prepare and apply one under coat and two finishing coats of gloss oil paint to;</u>				
F	General surfaces of timber fascia 200 - 300mm girth	48	LM		
	Carried to collection				
	<u>COLLECTION</u> Brought Forward from Page No. BW Brought Down from		27 28 Above		
	TOTAL FOR ELEMENT NO. 4 <u>ROOFING AND RAINWATER DISPOSAL</u> <u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 5</u> <u>WALL FINISHES</u> <u>EXTERNAL WALL FINISHES</u> 12mm thick cement,sand render,with wood float finish , as described to:-				
A	Concrete or masonry surfaces of gables,parapets, columns and beam	97	SM		
	<u>Painting and decorations</u> <u>Prepare and apply one undercoat and two finishing coats "Permacoat" or equivalent exterior quality emulsion paint on:-</u>				
B	Fair faced surfaces of rendered concrete or masonry surfaces	97	SM		
	<u>INTERNAL WALL FINISHES</u> (ALL PROVISIONAL) <u>Internal wall finishes</u>				
C	Hack out joints and apply 12mm thick gauged lime plaster (1:2:9) in two coats finished with steel trowel on natural stone walling and beams	83	SM		
	<u>Painting and decorations</u> <u>Prepare and apply one undercoat and two finishing coats plastic Vinyl matt or equivalent emulsion paint on:-</u>				
D	Plastered surfaces	83	SM		
	<u>TOTAL FOR ELEMENT NO. 5</u> <u>WALL FINISHES</u> CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 6				
	<u>FLOOR FINISHES</u>				
	<u>Insitu cement and sand (1:3) screeded beds ,with steel trowelled finish, on concrete verandah walkways</u>				
A	25 mm non -coloured screed	0	SM		
B	Ditto 25 x 100 mm high skirting	0	LM		
	<u>Insitu cement and sand (1:3) screeded beds ,with wood trowelled finish, on concrete</u>				
	<u>(Class floor)</u>				
D	25 mm screed to receive floor terrazzo floor finish (ms)	87	SM		
	<u>Terrazzo (1:3) with approved coloured chippings, ground and polished smooth, including approved plastic dividing strips and non slip carborandums on staircase treads and ramps:</u>				
E	15 mm thick paving in floors / steps	87	SM		
F	Ditto 100 mm high skirting	51	LM		
	<u>CEILING FINISHES</u>				
	<u>(ALL PROVISIONAL)</u>				
	<u>UPVC ceiling</u>				
G	Approved quality UPVC ceiling boards fixed to and including 50 x 50mm framing sections sawn cypress timber brandering at 600mm centers both ways.	87	SM		
H	<u>Extra over</u> UPVC ceiling board for forming removable access trap door size 600x600mm with 100 x 50mm sawn treated cypress trimming joists 120 x 25mm wrot cypress frame all round and 9mm removable chipboard panel set loose on top of framing	1	NO		
	<u>UPVC Cornice</u>				
J	100x 25mm PVC Moulded cornice	42	LM		
	<u>TOTAL FOR ELEMENT NO. 6</u>				
	<u>FLOOR & CEILING FINISHES</u>				
	<u>CARRIED TO SUMMARY</u>				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ELEMENT NO. 7</u>				
	<u>WINDOWS</u>				
A	175 x 75 mm thick precast concrete window; weathered and throated	9	LM		
	<u>Steel Casement Windows</u>				
	<u>Purpose made steel window casements in 25 mm thick z - sections, T-sections and flat bars; complete with hinges, stays, fasteners, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Burglar proofing grilles included)</u>				
B	Window Size 1500x1500mm high	5	NO		
	<u>GLASS & GLAZING TO METAL WITH PUTTY</u>				
	<u>Clear sheet Glass</u>				
C	4 mm thick clear and one way tinted in selected areas	11	SM		
	<u>Obscure sheet Glass</u>				
D	5 mm thick	0	SM		
	<u>Prepare and apply two undercoats and one finishing coat gloss oil paint to;</u>				
E	Steel window surfaces / grilles; measured generally	11	SM		
	<u>DOORS</u>				
	<u>(ALL PROVISIONAL)</u>				
	<u>Steel Casement Doors</u>				
	<u>Standard door complete with hinges, permanent vent with mosquito gauze and sheet metal hood etc assembled and fixed to opening including cutting and pinning lugs to concrete or blockwork surround and bedding frame in cement and sand mortar (1:4) (Grille, 3 lever "Union" or approved equivalent steel lock and Glazing included)</u>				
F	Door Overall size 900 x 2400 mm high; Single door	1	NO		
F	Door Overall size 1200 x 2050 mm high; Double door	0	NO		
	<u>Prepare and Apply Three Coats of Gloss Oil Paint to:-</u>				
G	Steel door general surfaces	4	SM		

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	GRAND SUMMARY				
		PAGE	OFFICIAL USE		TENDERER'S USE
	<u>PRELIMINARIES</u>				
	Particular and General Preliminaries				
	<u>BUILDERS WORKS</u>				
	2 BILL NO 1(CONSTRUCTION OF 1 NO. NEW CLASSROOM SENIOR POLYTECHNIC)	BW /11			
	3 BILL NO 2(2 NO DOOR AND URINAL PIT LATRINE AT SENIOR POLYTECHNIC)	BW /21			
	4 BILL NO 3(CONSTRUCTION OF 1 NO. NEW CLASS AT MANGOTO ECDE CENTRE)	BW /32			
	<u>PRIME COST AND PROVISIONAL SUMS</u>				
	5 Prime Cost and Provisional Sums	BW/33			
	Sub - Total 1	KSHS.			
	GRAND TOTAL CARRIED TO FORM OF TENDER	KSHS.			

NAME OF TENDERER.....

ADDRESS.....

SIGNATURE.....STATUS.....

DATE.....

NAME OF WITNESS.....

ADDRESS.....

SIGNATURE.....

DATE.....