



**TENDER DOCUMENT FOR THE SUPPLY AND INSTALLATION OF
AUDITORIUM FURNITURE FOR
THE PROPOSED CONSTRUCTION OF TUITION BLOCK PHASE II,
BUILDING, MURANG'A UNIVERSITY OF
TECHNOLOGY, MURANG'A COUNTY**

TENDER NO. MUT / T07/ 2025/2026

PREPARED BY:

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**NAIROBI,
KENYA.**

OCTOBER, 2025

TENDER DOCUMENTS FOR THE SUPPLY AND INSTALLATION OF AUDITORIUM FURNITURE FOR THE PROPOSED CONSTRUCTION OF TUITION BLOCK PHASE II FOR THE MURANG'A UNIVERSITY OF TECHNOLOGY, MURANG'A COUNTY

1) NAME AND CONTACT ADDRESSES OF PROCURING ENTITY

Name: MURANG'A UNIVERSITY OF TECHNOLOGY Address: P.O
BOX 75 - 10200, MURANG'A, KENYA

Email address: info@mut.ac.ke, Tel: +254-771-370-824

2) Invitation to Tender No; MUT/T O7 / AUDITORIUM FURNITURE/2025/2026

3) Tender Name: The Supply and Installation of Auditorium Furniture for The Proposed Construction of Tuition Block Phase II Building for Murang'a University of Technology.

4) Edition No.1 dated O C T O B E R 2025

TABLE OF CONTENTS

INVITATION TO TENDER	v
PART 1: TENDERING PROCEDURES	1
SECTION I - INSTRUCTIONS TO TENDERERS.....	1
A. GENERALPROVISIONS	1
1.0 Scope of tender	1
2.0 Fraud and corruption.....	1
3.0 Eligible tenderers.....	1
4.0 Eligible goods, equipment, and services	3
5.0 Tenderer's responsibilities.....	3
B. CONTENTS OFTENDER DOCUMENTS.....	4
6.0 Sections of Tender Document	4
7.0 Clarification of Tender Document, Site Visit, Pre-tender Meeting.....	4
8.0 Amendment of Tender Documents	5
10.0 Language of Tender.....	5
11.0 Documents Comprising the Tender.....	5
12.0 Form of Tender and Schedules.....	6
13.0 Alternative Tenders	6
14.0 Tender Prices and Discounts	6
15.0 Currencies of Tender and Payment	7
16.0 Documents Comprising the Technical Proposal	7
17.0 Documents Establishing the Eligibility and Qualifications of The Tenderer	7
18.0 Period of Validity of Tenders	8
19.0 Tender Security.....	8
20.0 Format and Signing of Tender.....	9
D. SUBMISSION AND OPENINGOFTENDERS	9
21.0 Sealing and Marking of Tenders.....	9
22.0 Deadline for Submission of Tenders	10
23.0 Late Tenders	10
24.0 Withdrawal, Substitution, and Modification of Tenders	10
25.0 Tender Opening	10
E. EVALUATION AND COMPARISONOFTENDERS.....	11
26.0 Confidentiality	11
27.0 Clarification of Tenders	11
29.0 Determination of Responsiveness	12
30.0 Non-material Non-conformities	12
31.0 Arithmetical Errors	12
33.0 Margin of Preference and Reservations.....	13
34.0 Nominated Subcontractors	13
35.0 Evaluation of Tenders.....	13
36.0 Comparison of tenders.....	14
37.0 Abnormally low tenders and abnormally high tenders.....	14
38.0 Unbalanced and/or front-loaded tenders	14
39.0 Qualifications of the tenderer	15
40.0 Lowest evaluated tender	15
41.0 Procuring entity's right to accept any tender, and to reject any or al tenders.	15

F. AWARD OF CONTRACT	15
42.0 Award criteria.....	15
43.0 Notice of intention to enter into a contract.....	16
44.0 Standstill Period.....	16
45.0 Debriefing By The Procuring Entity.....	16
46.0 Letter of Award	16
47.0 Signing of Contract.....	16
48.0 Performance Security	16
49.0 Publication of Procurement Contract	16
50.0 Procurement related Complaint and Administrative Review	17
SECTION II - TENDER DATA SHEET (TDS)	18
SECTION III - EVALUATION AND QUALIFICATION CRITERIA	22
1. General Provisions.....	22
2. Preliminary examination for Determination of Responsiveness	22
3. Technical Evaluation	22
4. Tender Evaluation.....	22
5. Multiple Contracts	23
6. Margin of Preference	23
7. Post qualification and Contract ward.....	23
8. QUALIFICATION FORM	25
SECTION IV –TENDERING FORMS.....	28
1. FOREIGN TENDERERS 40% RULE	28
2. Form EQU: EQUIPMENT	29
3. FORM PER - 1:	30
4. FORM PER - 2:	31
5. TENDERERS QUALIFICATION WITHOUT PRE-QUALIFICATION.....	33
OTHER FORMS	46
1. FORM OF TENDER	46
a) TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE	49
b) CERTIFICATE OF INDEPENDENT TENDER DETERMINATION	52
c) SELF-DECLARATION FORM - SELF DECLARATION OF THE TENDERER.....	53
d) APPENDIX 1 - FRAUD AND CORRUPTION	56
2. FORM OF TENDER SECURITY – DEMAND BANK GUARANTEE	58
3. FORM OF TENDER SECURITY (INSURANCE GUARANTEE).....	59
4. FORM OF TENDER-SECURING DECLARATION.....	60
5. APPENDIX TO TENDER.....	61

SECTION V – BILLS OF QUANTITIES	65
1. PREAMBLES	65
2. Bill No. 1 – Preliminary Items	69
3. Bill No. 2: Work Items	BW/1
4. Bill No. 3: Provisional Sums	PS/1
5. GRAND SUMMARY	G/S
SECTION VI - SPECIFICATIONS	SP/1
SECTION VII - DRAWINGS	D/1
SECTION VIII - GENERAL CONDITIONS OF CONTRACT (GCC)	CC/1
1. General Provisions	CC/1
2. The Procuring Entity	CC/7
3. The Engineer	CC/8
4. The Contractor	CC/10
5. Nominated Subcontractors	CC/18
6. Staff and Labor	CC/19
7. Plant, Materials and Workmanship	CC/22
8. Commencement, Delays and Suspension	CC/25
9. Tests on Completion	CC/28
10. Procuring Entity's Taking Over	CC/29
11. Defects Liability	CC/30
12. Measurement and Evaluation	CC/32
13. Variations and Adjustments	CC/34
14. Contract Price and Payment	CC/38
15. Termination by Procuring Entity	CC/44
16. Suspension and Termination by Contractor	CC/46
17. Risk and Responsibility	CC/48
18. Insurance	CC/50
19. Force Majeure	CC/53
20. Settlement of Claims and Disputes	CC/56
Section IX - Special Conditions of Contract	CC/60
SECTION X – CONTRACT FORMS	CC/62
FORM No. 1 - NOTIFICATION OF INTENTION TO AWARD	CC/63
FORM No. 2 –REQUEST FOR REVIEW	CC/66
FORM No. 3 – LETTER OF AWARD	CC/67
FORM No. 4 – CONTRACT AGREEMENT	CC/68
FORM No. 5 - PERFORMANCE SECURITY [Option 1 - Unconditional Demand Bank Guarantee]	CC/69
FORM No. 6- PERFORMANCE SECURITY [Option 2 – Performance Bond]	CC/70
FORM No. 7 – ADVANCE PAYMENT SECURITY	CC/72
FORM No. 8 – RETENTION MONEY SECURITY	CC/73
FORM No. 9 – BENEFICIAL OWNERSHIP DISCLOSURE FORM	CC/74

INVITATION TO TENDER

PROCURING ENTITY: MURANG'A UNIVERSITY OF TECHNOLOGY.

CONTRACT NAME AND DESCRIPTION: THE SUPPLY AND INSTALLATION OF FURNITURE FOR THE PROPOSED CONSTRUCTION OF TUITION BLOCK II BUILDING FOR THE MURANG'A UNIVERSITY OF TECHNOLOGY, MURANG'A COUNTY.

1. The **Murang'a University of Technology (hereinafter referred to as MUT)** invites sealed tenders for the Supply and Installation of Furniture for Tuition Block Phase II Building for Auditorium and Lecture Theatre,
2. Tendering will be conducted under open competitive method (**National**) using a standardized tender document. Tendering is open to all qualified and interested Tenderers.

The tendering is open to those registered with the National Construction Authority.

3. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours **[0900 to 1500 hours]** at the address given below.
4. A complete set of tender documents may be purchased or obtained by interested tenders upon payment of non-refundable fees of **KShs. 1,000.00 (KShs. One Thousand only)** in cash or Banker's Cheque and payable to the address given below. Tender documents may be obtained electronically from the Public Procurement Information Portal (PIIP) www.tenders.go.ke and the University Website(s) <https://www.mut.ac.ke/tender/>. Tender documents obtained electronically will be **free of charge**.
5. Tender documents may be viewed and downloaded for free from the PIIP website www.tenders.go.ke and the University website <https://www.mut.ac.ke/tender/>. Tenderers who download the tender document must forward their particulars immediately to tenders@mut.ac.ke with a copy to procurement@mut.ac.ke to facilitate any further clarification or addendum.
6. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain **valid for 84 days** from the date of opening of tenders.
7. All Tenders must be accompanied by a “**Tender Security**” of **KShs. 1,000,000.00 (KShs. One Million only)** valid for **120 days** from the date of opening of tenders.
8. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
9. Bidders are required to attend a **Mandatory Site Visit** at Murng'a University of Technology on the **OCTOBER 2025 strictly at 10.00 AM. (Bidders will be issued with a Site Visit Certificate)**.
10. Completed tenders must be delivered to the **tender box** situated at the address below **OCTOBER,2025 at 11.00 A.M.** Electronic Tenders **will not** be permitted.
11. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.
12. Late tenders will be rejected.

13. The addresses referred to above are:

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

Murang'a University of Technology Main Campus, Procurement Department opposite the Old University Administration Block during normal working hours [0900 to 1500 hours]

P.O Box 75-10200, Murang'a, Kenya

Procurement Department: Phone: 0706-249 039, Email: tenders@mut.ac.ke or procurement@mut.ac.ke

B. Address for Submission of Tenders.

Tender Box, situated at the Ground Floor of the Old University Administration Block

Murang'a University of Technology Main Campus,

P.O Box 75-10200, Murang'a, Kenya

C. Address for Opening of Tenders.

Murang'a University of Technology Main Campus in the Assembly Hall, directly opposite the Old University Administration Block.

Murang'a University of Technology Main Campus,

P.O Box 75-10200, Murang'a, Kenya

VICE CHANCELLOR MURANG'A UNIVERSITY OF TECHNOLOGY

PART1: TENDERING PROCEDURES

SECTION I - INSTRUCTIONS TO TENDERERS A

GENERAL PROVISIONS

1.0 Scope of tender

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

1.2 Throughout this tendering document:

- a) The term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the TDS, distributed or received through the electronic-procurement system used by the Procuring Entity) with proof of receipt;
- b) If the context so requires, “singular” means “plural” and vice versa;
- c) “Day” means calendar day, unless otherwise specified as “Business Day”. A Business Day is any day that is an official working day of the Procuring Entity. It excludes official public holidays.

2.0 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 Tenderers shall permit and shall cause their agents (whether declared or not), subcontractors, sub-consultants, service providers, suppliers, and their personnel, to permit the Procuring Entity to inspect all accounts, records and other documents relating to any initial selection process, pre-qualification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Procuring Entity.

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. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.

3.0 Eligible tenderers

3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.8, or an individual or any combination of such entities in the form of a joint venture (JV) under an existing agree mentor with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender. The maximum number of JV members shall be specified in the **TDS**.

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

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

- a) Directly or indirectly controls, is controlled by or is under common control with another tenderer;
 - b) Receives or has received any direct or indirect subsidy from another tenderer;
 - c) Has the same legal representative as another tenderer.
 - d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process.
 - e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods or works that are the subject of the tender.
 - f) Any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as a consultant for Contract implementation.
 - 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.
 - h) Has a close business or personal relationship with senior management or professional staff of the Procuring Entity who has the ability to influence the bidding process and:
 - 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) May be involved in the implementation or supervision of such Contract unless the conflicts stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.
- 34** A tenderer shall not be involved in corrupt, coercive, obstructive or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified.
- 35** 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. Members of a joint venture may not also make an individual tender, be a sub-contractor in a separate tender or be part of another joint venture for the purposes of the same Tender. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender.
- 36** A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT3.9. A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.
- 37** A 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.
- 38** A Tenderer that is a state-owned enterprise or a public institution in Kenya may be eligible to tender and be awarded Contract(s) only if it is determined by the Procuring Entity to meet the following conditions, i.e. if it is:
- i) A legal public entity of 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.
- 39** Firms and individuals shall be ineligible if their countries of origin are:
- (a) As a matter of law or official regulations, Kenya prohibits commercial relations with that country;
 - (b) By an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.

A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

- 3.10** Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, local sub-contracts and labor) from citizen 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 for this purpose in *“SECTION II - EVALUATION AND QUALIFICATION CRITERIA, Item 9”*.
- 3.11** Pursuant to the eligibility requirements of ITT 3.10, a tender is considered a foreign tenderer, If it is registered in Kenya and has less than 51 percent ownership by nationals of Kenya and if it does not subcontract to foreign firms or individuals more than 10 percent of the contract price, excluding provisional sums. JVs are considered as foreign tenderers if the individual member firms registered in Kenya have less 51 percent ownership by nationals of Kenya. 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.
- 4.14** A Kenyan tenderer shall be eligible to tender if it provides evidence of having fulfilled his/her tax obligations by producing valid tax compliance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

40 Eligible goods, equipment, and services

- 41** Goods, equipment and services to be supplied under the Contract may have their origin in any country that is not ineligible 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.
- 42** 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.

50 Tenderer's responsibilities

- 51** 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.
- 52** The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine and inspect 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 the tenderer's own expense.
- 53** 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 examination and inspection.

- 54 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

6.0 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 10.

PART 1: Tendering Procedures Section I

– Instructions to Tenderers Section II –

Tender Data Sheet (TDS) Section III-

Evaluation and Qualification Criteria Section

IV – Tendering Forms

PART 2: Works' Requirements

Section V - Bills of Quantities

Section VI - Specifications Section

VII - Drawings

PART 3: Conditions of Contract and Contract Forms Section VIII

- General Conditions (GCC)

Section IX - Special Conditions of Contract

Section X- Contract Forms

- 6.2 The Invitation to Tender Notice issued by the Procuring Entity is not part of the Contract documents. 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 a pre-arranged site visit and those of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 10. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

- 6.3 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.

7.0 Clarification of Tender Document, Site Visit, Pre-tender Meeting

- 7.1 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 if provided for in accordance with ITT 7.2. 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 7.4, including a description of the inquiry but without identifying its source. If so specified in the **TDS**, the Procuring Entity shall also promptly publish its response at the web page identified in the **TDS**. Should the clarification result in changes to the essential elements of the Tender Documents, the Procuring Entity shall amend the Tender Documents following the procedure under ITT 8 and ITT 22.2.

- 7.2 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the site(s) of the required contracts and obtain all information that may be necessary for preparing a tender. The costs of visiting the Site shall be at the Tenderer's own expense. The Procuring Entity shall specify in the **TDS** if a pre-arranged Site visit and/or a pre-tender meeting will be held, when and where. The Tenderer's designated representative is invited to attend a pre-arranged site visit and a pre-tender meeting, as the case may be. The purpose of the site visit and the pre-tender meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

- 7.3 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.

- 74 Minutes of a pre-arranged site visit and those of the pre-tender meeting, 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. Minutes shall not identify the source of the questions asked.
- 75 The Procuring Entity shall also promptly publish anonymized (***no names***) Minutes of the pre-arranged site visit and those of the pre-tender meeting at the web page identified in the **TDS**. Any modification to the Tender Documents that may become necessary as a result of the pre-arranged site visit and those of the pre-tender meeting 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. Non-attendance at the pre-arranged site visit and the pre-tender meeting will not be a cause for disqualification of a Tenderer.
- 80 Amendment of Tender Documents**
- 81 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the Tender Documents by issuing addenda.
- 82 Any addendum issued shall be part of the Tender Documents and shall be communicated in writing to all who have obtained the Tender Documents from the Procuring Entity. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's website in accordance with ITT 7.5.
- 83 To give Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity should extend the deadline for the submission of Tenders, pursuant to ITT 22.2.

C. PREPARATION OF TENDERS

9. Cost of Tendering

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.

10.0 Language of Tender

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.

11.0 Documents Comprising the Tender

- 11.1 The Tender shall comprise the following:
- a) Form of Tender prepared in accordance with ITT 12;
 - b) Schedules including priced Bill of Quantities, completed in accordance with ITT 12 and ITT 14;
 - c) Tender Security or Tender-Securing Declaration, in accordance with ITT 19.1;
 - d) Alternative Tender, if permissible, in accordance with ITT 13;
 - e) **Authorization**: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 20.3;
 - f) **Qualifications**: documentary evidence in accordance with ITT 17 establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted.
 - g) **Conformity**: a technical proposal in accordance with ITT 16.
 - h) Any other document required in the **TDS**.
- 11.2 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 JV Agreement. Change of membership and conditions of the JV prior to contract signature will render the tender liable for disqualification.

12.0 Form of Tender and Schedules

- 12.1** 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. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
- 12.2** 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.

13. Alternative Tenders

- 13.1** Unless otherwise specified in the TDS, alternative Tenders shall not be considered.
- 13.2** 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.
- 13.3** 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.
- 13.4** 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.

14.0 Tender Prices and Discounts

- 14.1** 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.
- 14.2** 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.
- 14.3** The price to be quoted in the Form of Tender, in accordance with ITT 12.1, shall be the total price of the Tender, including any discounts offered.
- 14.4** The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 12.1.
- 14.5** 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.
- 14.6** 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 14.4, provided the Tenders for all lots (contracts) are opened at the same time.

- 147 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.

150 Currencies of Tender and Payment

- 151 The currency(ies) of the Tender and the currency(ies) of payments shall be the same.
- 152 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) A Tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside Kenya (referred to as “the foreign currency requirements”) shall (if so allowed in the **TDS**) indicate in the Appendix to Tender the percentage(s) of the Tender Price (excluding Provisional Sums), needed by the Tenderer for the payment of such foreign currency requirements, limited to no more than two foreign currencies.
 - b) The rates of exchange to be used by the Tenderer in arriving at the local currency equivalent and the percentage(s) mentioned in (a) above shall be specified by the Tenderer in the Appendix to Tender and shall be based on the exchange rate provided by the Central Bank of Kenya on the date 30 days prior to the actual date of tender opening. Such exchange rate shall apply for all foreign payments under the Contract.
- 153 Tenderers may be required by the Procuring Entity to justify, to the Procuring Entity's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data in the Appendix to Tender are reasonable, in which case a detailed break down of the foreign currency requirements shall be provided by Tenderers.

16.0 Documents Comprising the Technical Proposal

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.

170 Documents Establishing the Eligibility and Qualifications of the Tenderer

- 171 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.
- 172 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.
- 173 If a margin of preference applies as specified in accordance with ITT 33.1, national tenderers, individually or in joint ventures, applying for eligibility for national preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.
- 174 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.
- 175 The purpose of the information described in ITT 17.4 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 the required information on its ownership and control.
- 176 The Tenderer shall provide further documentary proof, information, or authorizations that the Procuring Entity may request in relation to ownership and control which in formation on any changes to the information which was provided by the tenderer under ITT 6.4. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.

- 177 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.
- 178 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.
- 179 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 pending the outcome of (iii),
 - iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other person has committed any criminal offence.
- 17.10 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 of ITT 17.8 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.

18.0 Period of Validity of Tenders

- 18.1. 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 22). A tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
- 18.2 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 19, 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.

190 Tender Security

- 191 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.
- 192 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:
- i) cash.
 - ii) a bank guarantee.
 - iii) a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority.
 - (iv) a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya, from a reputable source, and an eligible country.
- 193 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 18.2.
- 194 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.

- 195** If a Tender Security is specified pursuant to ITT 19.1, 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 non-responsive or a bidder declines to extend tender validity period.
- 196** 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.
- 197** The Tender Security may be forfeited, or the Tender-Securing Declaration executed:
- a) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereof provided by the Tenderer; or
 - b) if the successful Tenderer fails to: -
 - i) sign the Contract in accordance with ITT 47; or
 - ii) furnish a Performance Security and if required in the TDS, and any other documents required in the TDS.
- 198** Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA to debar the Tenderer from participating in public procurement as provided in the law.
- 199** 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.
- 19.10** A tenderer shall not issue a tender security to guarantee itself.

200 Format and Signing of Tender

- 201** The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 11 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 13, 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.
- 202** 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.
- 203** 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.
- 204** In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 205** 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

210 Sealing and Marking of Tenders

- 21.1** 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 13, 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.

212 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 misplaced or opened prematurely will not be accepted.

220 Deadline for Submission of Tenders

221 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**.

222 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.

23.0 Late Tenders

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

240 Withdrawal, Substitution, and Modification of Tenders

241 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:

- a) prepared and submitted in accordance with ITT 20 and ITT 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” “MODIFICATION;” and
- b) received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 22.

242 Tenders requested to be withdrawn in accordance with ITT 24.1 shall be returned unopened to the Tenderers.

243 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.

25 Tender Opening

251 Except in the cases specified in ITT 23 and ITT 24.2, 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 22.1, shall be as specified in the **TDS**.

- 252 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.
- 253 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.
- 254 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.
- 255 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.
- 256 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 Bill of Quantities (to be decided only the tender opening committee) are to be initialed by the members of the tender opening committee attending the opening.
- 257 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 23.1).
- 258 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 new as required.
 - e) Number of pages of each tender document submitted.
- 259 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.

E. EVALUATION AND COMPARISON OF TENDERS

26 Confidentiality

- 261 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 43.
- 262 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.
- 263 Notwithstanding ITT 26.2, 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.

27 Clarification of Tenders

- 271 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 tenders 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 31.

272 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.

280 Deviations, Reservations, and Omissions

281 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.

290 Determination of Responsiveness

291 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 11.

292 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;
- 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;
- c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.

293 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 16, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.

294 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.

300 Non-material Non-conformities

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

302 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify non-material 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.

303 Provided that a tender is substantially responsive, the Procuring Entity shall rectify quantifiable non-material 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.

31.0 Arithmetical Errors

311 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.

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

- a) Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.
- b) Any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid prices 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

313 Tenderers shall be notified of any error detected in their bid during the notification of award.

32.0 Conversion to Single Currency

For evaluation and comparison purposes, the currency(ies) of the Tender shall be converted into a single currency as specified in the **TDS**.

33.0 Margin of Preference and Reservations

331 A margin of preference may be allowed only when the contract is open to international competitive tendering where foreign contractors are expected to participate in the tendering process and where the contract exceeds the value/threshold specified in the Regulations.

332 A margin of preference shall not be allowed unless it is specified so in the **TDS**.

333 Contracts procured on basis of international competitive tendering shall not be subject to reservations exclusive to specific groups as provided in ITT 33.4.

334 Where it is intended to reserve a contract to a specific group of businesses (these groups are Small and Medium Enterprises, Women Enterprises, Youth Enterprises and Enterprises of persons living with disability, as the case may be), and who are appropriately registered as such by the authority to be specified in the **TDS**, a procuring entity shall ensure that the invitation to tender specifically indicates that only businesses or firms belonging to the specified group are eligible to tender. No tender shall be reserved to more than one group. If not so stated in the Invitation to Tender and in the Tender documents, the invitation to tender will be open to all interested tenderers.

34.0 Nominated Subcontractors

341 Unless otherwise stated in the **TDS**, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected/nominated by the Procuring Entity. In case the Procuring Entity nominates a subcontractor, the subcontract agreement shall be signed by the Subcontractor and the Procuring Entity. The main contract shall specify the working arrangements between the main contractor and the nominated subcontractor.

342 Tenderers may propose sub-contracting up to the percentage of total value of contracts or the volume of works as specified in the **TDS**. The subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.

343 Domestic subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated so by the Procuring Entity in the **TDS** as can be met by subcontractors referred to 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.

35. Evaluation of Tenders

351 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 Lowest Evaluated Tender in accordance with ITT 40.

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

- a) Price adjustment in accordance with ITT 31.1 (iii); excluding provisional sums and contingencies, if any, but including Daywork items, where priced competitively;
- b) Price adjustment due to discounts offered in accordance with ITT 14.4;
- c) Converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 32;
- d) Price adjustment due to quantifiable non-material non-conformities in accordance with ITT 30.3; and
- e) Any additional evaluation factors specified in the **TDS** and Section III, Evaluation and Qualification Criteria.

- 353 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.
- 354 Where the tender involves multiple lots or contracts, the tenderer will be allowed to tender for one or more lots (contracts). Each lot or contract will be evaluated in accordance with ITT 35.2. The methodology to determine the lowest evaluated tenderer or tenderers base done lot (contract) or based on a combination of lots (contracts), will be specified in Section III, Evaluation and Qualification Criteria. In the case of multiple lots or contracts, tenderer will be required to prepare the Eligibility and Qualification Criteria Form for each Lot.

36.0 Comparison of tenders

The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 35.2 to determine the Tender that has the lowest evaluated cost.

37.0 Abnormally low tenders and abnormally high tenders

Abnormally Low Tenders

- 371 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 regard to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.
- 372 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.
- 373 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.

Abnormally high tenders

- 374 An abnormally high tender 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.
- 375 In case of an abnormally high 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 the 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.
- 376 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised, 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.

38.0 Unbalanced and/ or front-loaded tenders

- 381 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or frontloaded, 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.

- 382** After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:
- a) accept the Tender;
 - 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;
 - c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works;
 - d) reject the Tender,

390 Qualifications of the tenderer

- 391** 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.
- 392** The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 17. 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.
- 393** 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.

400 Lowest evaluated tender

Having compared the evaluated prices of Tenders, the Procuring Entity shall determine the Lowest Evaluated Tender. The Lowest 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.

41.0 Procuring entity's right to accept any tender, and to reject any or all tenders.

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

F. AWARD OF CONTRACT

42.0 Award criteria

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

430 Notice of Intention to Enter into a Contract/Notification of Award

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 stand still period;

440 Standstill Period

441 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.

442 Where a Stand still 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.

450 Debriefing by The Procuring Entity

451 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 43, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.

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

46.0 Letter of Award

Prior to the expiry of the Tender Validity Period and upon expiry of the Stand still Period specified in ITT 42.1, upon addressing a complaint that has been filed within the Stand still 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.

47.0 Signing of Contract

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

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

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

48.0 Performance Security

481 Within twenty-one (21) days of the receipt of the Letter of Award from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the **TDS**, in accordance with the General Conditions of Contract, subject to ITT 38.2 (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.

482 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.

483 Performance security shall not be required for contracts estimated to cost less than the amount specified in the Regulations.

49.0 Publication of Procurement Contract

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

- a) name and address of the Procuring Entity;

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

50.0 Procurement related Complaints and Administrative Review

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

50.2 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.

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
A. General	
ITT 1.1	<p>The name of the contract is: - The Supply and Installation of Furniture for the Proposed Construction of the Tuition Block Phase II Building for Murang'a University of Technology.</p> <p>The reference number of the Contract is: MUT/ T 07/UADITORIUM FURNITURE/2025/206</p>
ITT 2.4	The Information made available on competing firms is as follows: Not Applicable
ITT 2.4	The firm that provided consulting services for the contract being tendered for are: UNIVERSITY OF NAIROBI ENTERPRISE SERVICES (UNES), P.O. BOX 30197-00100, TEL: +254 02 310900, NAIROBI, KENYA
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: Not Applicable
B. Contents of Tender Document	
ITT 7.1	<p>(i) The Tenderer will submit any request for clarifications in writing at the Address: Murang'a University of Technology, Kiharu; postal Address, P.O Box 75-10200, Murang'a Email: tenders@mut.ac.ke and copy to procurement@mut.ac.ke to reach the Procuring Entity not later than 5 (five) days to the Tender Closing date.</p> <p>(ii) The Procuring Entity shall publish its response at the website www.mut.ac.ke or www.tenders.go.ke</p>
ITT 7.2	<p>(A) A pre-arranged pretender site visit shall take place at the following date, time and place: On the OCTOBER 2025, at 10.00 AM at the Murang'a University of Technology in the University Conference Hall.</p> <p>(B) Pre-Tender meeting shall take place at the following date, time and place: On the OCTOBER 2025, at 11.00 AM at the Murang'a University of Technology in the University Conference Hall.</p>
ITT 9.1	<p>For Clarification of Tender purposes, for obtaining further information and for purchasing tender documents, the Procuring Entity's address is:</p> <p>Procurement Office,</p> <p>Murang'a University of Technology Main Campus, procurement Department opposite the Old Administration Block during normal working hours [0900 to 1500 hours].</p> <p>P.O Box 75-10200, Murang'a, Kenya Procurement Department: Phone: 0706-249 039, Email: tenders@mut.ac.ke or procurement@mut.ac.ke.</p>

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
C. Preparation of Tenders	
ITT 13.1	Alternative Tenders shall not be considered.
ITT 13.2	Alternative times for completion shall not be permitted .
ITT 13.4	Alternative technical solutions shall not be permitted for any part of the Works.
ITT 14.5	The prices quoted by the Tenderer shall be fixed .
ITT 15.2 (a)	Foreign currency requirements are not allowed .
ITT 18.1	The Tender validity period shall be 84 (eighty-four) days.
ITT 18.3	The Number of days beyond the expiry of the initial tender validity period will be 36 (thirty-six) days.
ITT 19.1	Tenderer shall provide a Tender Security The type of Tender security shall be in the amount of Kenya shillings One Million only (Kshs. 1,000,000.00) .
ITT 20.1	In addition to the original of the Tender, the number of copies is: One .
ITT 20.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of: Power of Attorney attested by Commissioner of Oaths
D. Submission and Opening of Tenders	
ITT 22.1	<p>(A) For Tender submission purposes only, the Procuring Entity's address is:</p> <p>(1) Procurement Department,</p> <p>Murang'a University of Technology Main Campus, procurement Department opposite the Old Administration Block during normal working hours [0900 to 1500 hours].</p> <p>P.O Box 75-10200, Murang'a, Kenya Procurement Department: Phone: 0706-249 039, Email: tenders@mut.ac.ke or procurement@mut.ac.ke</p> <p>(2) Date and time for submission of Tenders; on or before OCTOBER, 2025 at 11.00 A.M</p> <p>(3) Tenderers shall not submit tenders electronically.</p>

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
ITT 25.1	<p>The Tender opening shall take place at the time and the address for Opening of Tenders is provided below:</p> <p>(1) Procurement Department,</p> <p>Murang'a University of Technology Main Campus in the Assembly Hall, directly opposite the Old Administration Block.</p> <p>Murang'a University of Technology Main Campus,</p> <p>P.O Box 75-10200, Murang'a, Kenya</p> <p>(2) State date and time of tender opening on or before OCTOBER, 2025 at 11.00 A.M</p>
ITT 25.1	Tenderers are not allowed to submit Tenders electronically.
E. Evaluation and Comparison of Tenders	
ITT 30.3	The adjustment shall be based on the average price of the item or component as quoted in other substantially responsive Tenders. If the price of the item or component cannot be derived from the price of other substantially responsive Tenders, the Procuring Entity shall use its best estimate.
TT 32.1	<p>The currency that shall be used for Tender evaluation and comparison purposes only to convert at the selling exchange rate all Tender prices expressed in various currencies into a single currency is: Kenya Shillings.</p> <p>The source of exchange rate shall be: The Central bank of Kenya (mean rate)</p> <p>The date for the exchange rate shall be: the date for Submission of the Tenders.</p>
ITT 33.2	A margin of preference shall apply.
ITT 33.4	No tender shall be reserved to any group
ITT 34.1	The Procuring Entity intends to execute certain specific parts of the Works by Subcontractors selected in advance.
ITT 34.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: 40% of the total contract amount. Tenderers planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity (ies) or parts of the Works to be subcontracted along with complete details of the subcontractors and their qualification and experience.
ITT 34.3	<p>The parts of the Works for which the Procuring Entity permits Tenderers to propose Specialized Subcontractors are designated as follows:</p> <ol style="list-style-type: none"> 1) Procuring of the furniture. 2) Installation of the furniture. <p>For the above-designated parts of the Works that shall require Specialized Subcontractors, the relevant qualifications of the proposed Specialized Subcontractors will be added to the qualifications of the Tenderer for the purpose of evaluation.</p>

Reference to ITC Clause	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
ITT 35.2 (e)	Additional requirements apply. These are detailed in the evaluation criteria in Section III, Evaluation and Qualification Criteria. Refer to pages 25 to 27 and 62 to 64
ITT 48.1	Other documents required in addition to the Performance Security are a statement of work methods, equipment, personnel, Work Programme and evidence of Subcontractors' undertaking that they will execute the Subcontract agreement with the Main Contractor.
ITT 50.1	<p>The procedures for making a Procurement-related Complaint are detailed in the “Notice of Intention to Award the Contract” herein and are also available from the PPRA Website www.ppra.go.ke or email complaints@ppra.go.ke.</p> <p>If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or email to:</p> <p>For the attention: Prof. Dickson Nyariki, Ph.D.</p> <p>Title/position: Vice Chancellor</p> <p>Procuring Entity: Murang’a University of Technology</p> <p>Email address: info@mut.ac.ke and copy to vc@mut.ac.ke</p> <p>In summary, a Procurement-related Complaint may challenge any of the following (among others):</p> <ul style="list-style-type: none"> (i) the terms of the Tender Documents; and (ii) the Procuring Entity’s decision to award the contract.

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

10 GENERAL PROVISIONS

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

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

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

13 EVALUATION AND CONTRACT AWARD CRITERIA

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

2.0 PRELIMINARY EXAMINATION FOR DETERMINATION OF RESPONSIVENESS

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 mandatory requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements provided for in the preliminary evaluation criteria outlined below. The Standard Tender Evaluation Report Document for Goods and Works for evaluating Tenders provides very clear guide on how to deal with review of these requirements. Tenders that do not pass the Preliminary Examination will be considered non-responsive and will not be considered further.

To facilitate the Preliminary Examination a template is attached showing the list of documentation to be submitted to enable the evaluation of the Tender. (Refer to pages 25 to 27 and 62 to 64 herein)

30 TENDER EVALUATION (ITT 35)

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

- (i) Alternative Completion Times shall apply.**
- (ii) Alternative Technical Solutions for specified parts of the Works shall not apply**
- (iii) Other Criteria: Not Applicable**

40 MULTIPLE CONTRACTS

- 41 Multiple contracts will not be permitted in accordance with ITT 35.4. The Multiple **Contract does not apply**.

60 MARGIN OF PREFERENCE

- 61 If the TDS so specifies, the Procuring Entity will grant a margin of preference of fifteen percent (15%) to be loaded on evaluated prices of the foreign tenderers, where the percentage of share holding of Kenyan citizens is less than fifty-one percent (51%).
- 62 Contractors shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a particular contractor or group of contractors qualifies for a margin of preference.
- 63 After Tenders have been received and reviewed by the Procuring Entity, responsive Tenders shall be assessed to ascertain their percentage of shareholding of Kenyan citizens. Responsive tenders shall be classified into the following groups:
- i) *Group A:* tenders offered by Kenyan Contractors and other Tenderers where Kenyan citizens hold shares of over fifty-one percent (51%).
 - ii) *Group B:* tenders offered by foreign Contractors and other Tenderers where Kenyan citizens hold shares of less than fifty-one percent (51%).
- 64 All evaluated tenders in each group shall, as a first evaluation step, be compared to determine the lowest tender, and the lowest evaluated tender in each group shall be further compared with each other. If, as a result of this comparison, a tender from Group A is the lowest, it shall be selected for the award of contract. If a tender from Group B is the lowest, an amount equal to the percentage indicated in Item 6.1 of the respective tender price, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each tender from Group B. All tenders shall then be compared using new prices with added prices to Group B and the lowest evaluated tender from Group A. If the tender from Group A is still the lowest tender, it shall be selected for award. If not, the lowest evaluated tender from Group B based on the first evaluation price shall be selected.
7. **Post qualification and Contract award (ITT 39), more specifically,**
- a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.
 - b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.
 - i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow of **Kenya Shillings 10,000,000.00 (KShs. Five million only) per month**
 - ii) Minimum average annual construction turnover of **Kenya Shillings 75,000,000.00 (KShs. Seventy-five million only)** equivalent calculated as total certified payments received for contracts in progress and/or completed within the last **five (5)** years.
 - iii) At least **two (2)** of contract(s) of a similar nature executed within Kenya, or the East African Community or a broad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value **Kenya shillings 20,000,000.00 (KShs. Twenty million)** equivalent.
 - iv) Contractor's Representative and Key Personnel, which are specified as **Construction Manager**
 - v) Contractors key equipment listed on the table "Contractor's Equipment" below and more specifically listed as **applicable**.

iv) Other conditions depending on their seriousness.

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

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non- performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last five years. 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 Five years. All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or on going under 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.

QUALIFICATION FORM*

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)
1	Nationality	Nationality in accordance with ITT 3.6	Forms ELI – 1.1 and 1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by Kenya Revenue Authority in accordance with ITT 3.14.	Attachment	
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 3.7	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.8	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 1st January 2020.	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 1st January 2020.	Form CON – 2	

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)
11	Financial Capabilities	<p>(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 10,000,000.00 per month equivalent for the subject contract(s) net of the Tenderer's other commitments.</p> <p>(ii) The Tenderers shall also demonstrate, to the satisfaction of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.</p> <p>(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 three years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.</p>	Form FIN – 3.1, with attachments	
12	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings 75,000,000.00. equivalent calculated as total certified payments received for contracts in progress and/or completed within the last five years, divided by 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 five years , starting 1st January 2020.	Form EXP – 4.1	

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)
14	Specific Construction & Contract Management Experience	<p>A minimum number of two 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 2020 and tender submission deadline i.e. two contracts, each of minimum value Kenya shillings 35,000,000.00 equivalent.</p> <p>The similarity of the contracts shall be based on the following:</p> <ul style="list-style-type: none"> -The comprise supply and installation of furniture for the auditorium and lecture theatres, restaurant, The overall number approximately 860 seats and approximately tables 302 . 	Form EXP 4.2(a)	

SECTION IV - TENDERING FORMS

QUALIFICATION FORMS

1. FOREIGN TENDERERS 40%RULE

Pursuant to ITT 3.9, a foreign tenderer must complete this form to demonstrate that the tender fulfills this condition.

ITEM	Description of Work Item	Describe location of Source	COST in K. shillings	Comments, if any
A	Local Labor			
1				
2				
3				
4				
5				
B	Sub contracts from Local sources			
1				
2				
3				
4				
5				
C	Local materials			
1				
2				
3				
4				
5				
D	Use of Local Plant and Equipment			
1				
2				
3				
4				
5				
E	Add any other items			
1				
2				
3				
4				
5				
6				
	TOTAL COST LOCAL CONTENT		XXXXX	
	PERCENTAGE OF CONTRACT PRICE			

2. 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 <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> 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	

3. **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: <i>[insert title]</i>	
	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. **FORM PER - 2:**

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

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): _____

5. TENDERERS' QUALIFICATION WITHOUT PREQUALIFICATION

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.

51 FORM ELI -1.1

Tenderer Information Form

Date: _____

ITT No. and title: _____

Tenderer's name
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration: <i>[indicate country of Constitution]</i>
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITT 3.6 <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5 <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents establishing: <ul style="list-style-type: none">• Legal and financial autonomy• Operation under commercial law<ol style="list-style-type: none">1. Establishing that the Tenderer is not under the supervision of the Procuring Entity2. Included are the organizational chart and a list of Board of Directors

52 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: _____
<p>1. Attached are copies of original documents of <input type="checkbox"/> 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. <input type="checkbox"/> 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 3.5.</p> <p>2. Included are the organizational chart and a list of Board of Directors.</p>

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			
<input type="checkbox"/> Contract non-performance did not occur since 1 st January 2018 specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1.			
<input type="checkbox"/> Contract(s) not performed since 1 st January 2018 specified in Section III, Evaluation and Qualification Criteria, requirement 2.1			
<input type="checkbox"/> Contract(s) withdrawn since 1 st January 2018 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)
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/ number, and any other identification] Name of Procuring Entity: [insert full name] Address of Procuring Entity: [insert street/city/country] Reason(s) for nonperformance: [indicate main reason(s)]	[insert amount]
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
<input type="checkbox"/> No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.			
<input type="checkbox"/> 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 dispute	Amount in dispute (currency)	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>
----------------------	----------------------------	--	------------------------

Include details relating to potential bid-rigging practices such as previous occasions where tenders were withdrawn, jointbids with competitors, subcontracting work to unsuccessful tenderers, etc.

54 **FORM FIN – 3.1:**

Financial Situation and Performance

Tenderer's Name: _____

Date: _____

JV Member's Name _____

ITT No. and title: _____

5.4.1. 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)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

*Refer to ITT 15 for the exchange rate

5.4.2 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		

5.4.3 Financial documents

The Tenderer and its parties shall provide copies of financial statements for **three** 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 **three 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.

55 **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.

56 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		

57 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					
No.	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					

58 **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: _____	

59 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 <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
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:				

5.9 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 <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
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:				

5.9 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	

5.10 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.

Key Activity No One: _

Information				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JV <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
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:	

- 1. Activity No. Two
- 3.

OTHER FORMS

6. FORM OF TENDER

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

INSTRUCTIONS TO TENDERERS

- a) *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 (xxii) 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]

Date of this Tender submission: [insert date (as day, month and year) of Tender submission] **Request**
for Tender No.: [insert identification] **Name and description of Tender** [Insert as per ITT] **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 sum³ of Kenya Shillings [[Amount in figures] _____] Kenya Shillings [amount in words] _____

The above amount includes foreign currency⁴ amount (s) of [state figure or a percentage and currency] [figures] _____ [words] _____

2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Architect 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. We understand that you are not bound to accept the lowest or any tender you may receive.
5. We, the undersigned, further declare that:
- 6.
- 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

two foreign currencies are allowed.

³ *This sum should be carried forward from the Summary of the Bills of Quantities.*

⁴ *The percentage quoted above should not include provisional sums, and not more than*

- 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 sub-contractor, 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, Engineer, 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; and
- 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:

- a) Tenderer's Eligibility; Confidential Business Questionnaire - to establish we are not in any conflict of interest.
- (b) Certificate of Independent Tender Determination - to declare that we completed the tender without colluding with other tenderers.
- (a) Self-Declaration of the Tenderer - to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
- (d) 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

Tenderer 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 **Murang'a University of Technology** 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			

(i) Conflict of interest disclosure

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Tender has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer or influence the decisions of the Procuring Entity regarding this tendering process.		
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender Document.		

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
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.		

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 **Murang'a University of Technology** 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/Direct or 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 here in 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. Boxbeing a resident of
..... in the Republic ofdo 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 theafore said Bidder, its servants and/oragents/subcontractors will not engage in any corrupt or fraudulentpractice 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 here in 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 here by 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

1. Purpose

- 1.1 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.

2. Requirements

- 2.1 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.
- 2.2 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 as set 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 or for the tender to whom was awarded contract, or a member of the group of tenderers 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 sub section (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.

3. 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; “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;
 - iv) “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 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.

¹For the avoidance of doubt, a party's in eligibility to be awarded a contract shall includee, 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 _____ (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (hereinafter 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 thereof 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 **Murang’a University of Technology** (hereinafter called “the Procuring Entity”) in the sum of (Currency and guarantee amount) for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

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

[Date]

[Signature of the Guarantor]

[Witness]

[Seal]

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

FORM OF TENDER - SECURING DECLARATION

[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	<i>[To be entered by the Procuring Entity]</i>

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

Further to paragraph 2.0 under Section III, the following mandatory requirements shall be considered in the Preliminary evaluation to be conducted by Murang'a University of Technology.

ITEM	MANDATORY REQUIREMENTS	<i>For Procuring Entity's Use (Qualification met or Not Met)</i>
MR1	Registration under the Companies Act Cap. 486 Certified Copy of Certificate of Incorporation / Registration. This should include change of Particulars Where applicable. (All sub-contractors shall be required to meet this requirement)	
MR2	Provide CR12 issued within the last Six (6) months before tender submission date for all local bidders and national identity cards of directors for all local tenderers. International bidders will be required to provide CR12 of their local agents	
MR3	Valid Tax Compliance Certificate issued by Kenya Revenue Authority. (All domestic sub-contractors shall be required to meet this requirement)	
MR4	Provide letter of intent to enter into a contact agreement with the proposed domestic electrical sub-contractor for execution of the electrical works in the tender document and signed by all parties which must be executed and sealed by a licensed commissioner of oaths.	
MR5	Provide letter of intent to enter into a contact agreement with the proposed domestic plumbing, drainage, and fire suppression sub-contractor for execution of the relevant works in the tender document and signed by all parties which must be executed and sealed by a licensed commissioner of oaths.	
MR6	Provide letter of intent to enter into a contact agreement with the proposed domestic mechanical ventilation and aircondition installations sub-contractor for execution of the relevant works in the tender document and signed by all parties which must be executed and sealed by a licensed commissioner of oaths.	
MR7	Provide joint venture agreement/ letter of intent to enter into a Joint Venture or a Joint Venture agreement signed by all parties which must be executed and sealed by a licensed commissioner of oaths. (Where Applicable)	
MR8	Power of Attorney of the signatory of the tender to commit the tenderer and in a joint venture a party to the joint venture should be nominated to commit on behalf of the whole team.	
MR9	Valid copy of business permit /business license (All sub-contractors shall be required to meet this requirement)	
MR10	Proof of registration with National Construction Authority - NCA category 2 and above for Building and Civil Works Attach a valid annual Certificate for the year 2023. (All sub-contractors shall be required to meet this requirement)	
MR11	Proof of: Attach a valid annual practicing licenses for the year 2023.	
	<ul style="list-style-type: none"> ▪ Registration with the National Construction Authority (NCA) category 3 and above for Electrical Works 	
	<ul style="list-style-type: none"> ▪ Registration with Energy & Petroleum Regulatory Authority (EPRA) class B and above for Electrical Works 	

	<ul style="list-style-type: none"> Registration with Energy & Petroleum Regulatory Authority (EPRA) class 1 and above for Solar Works 	
	<ul style="list-style-type: none"> Registration with National Communication Authority of Kenya (CAK) class B and above for DATA works 	
MR12	<p>Proof of registration with National Construction Authority - NCA category 3 and above for mechanical ventilation and air-condition installations.</p> <p>Attach a valid annual Certificate for the year 2023.</p>	
MR13	Certified and signed audited accounts for the years 2020, 2021 and 2022. For purpose of the Evaluation the Accounts are considered to be certified if issued by a registered CPA firm reconized by ICPAK and signed by the Companies Directors.	
MR14	Tenderer shall provide proof of details of physical addresses of the Company/business, attach a lease agreement or proof of ownership of the office. Attach copies of premises ownership /lease or utility bills over the last 6 months.	
MR15	<p>Proof of Site Visit (<i>duly filled, signed, and stamped site visit form attached herewith for reference</i>).</p> <p>This form must be signed and stamped by Murang'a University of Technology representative on the specified date of site visit. The Tenderer shall provide proof that its representative is a permanent employee of the firm.</p>	
MR16	The Form of Tender shall be duly filled, signed, and stamped	
MR17	Provide a duly filled and signed Tender Security form and a Tender Security of Kenyan Shilling One Million (KSh 1,000,000.00) in accordance with ITT 19.2 .	
MR18	The Confidential Business Questionnaire shall be duly filled, signed, and stamped.	
MR19	Duly filled, signed, and stamped Certificate of Independent Tender Determination	
MR20	Duly filled, signed, and stamped Self Declaration form that the tenderer will not engage in any corrupt or Fraudulent Practice (All parties to the joint venture to provide this requirement) (All sub-contractors shall be required to meet this requirement)	
MR21	Duly filled, signed, and stamped Declaration and Commitment to the Code of Ethics. (All sub-contractors shall be required to meet this requirement)	
MR22	Duly filled "Historical Contract Non-Performance, Pending Litigation and Litigation History" form. (All sub-contractors shall be required to meet this requirement)	
MR23	Valid NSSF Compliance Certificate (Certified by NSSF). (All sub-contractors shall be required to meet this requirement)	
MR24	Valid NHIF Compliance Certificate (Certified by NHIF). (All sub-contractors shall be required to meet this requirement)	
MR25	Letter of Authority from the bidder to seek enquires from the Banks, NHIF, NSSF and any other in regard to this tender. (All sub-contractors shall be required to meet this requirement)	

MR26	<p>The bid document “Original” and “Copies” must be sequentially paginated /serialized.</p> <p>Bidders Must have set of their documents paginated (Serialized) to ensure compliance with section 78(5) of Public procurement and Assets Disposal Act, 2015. (From the first pageIn format 1,2,3,4 to the last page)</p>	
<p>Tenders that do not pass the Preliminary Examination will be considered non-responsive and will not be considered further.</p>		

PART II - WORKS REQUIREMENTS

SECTION V - BILLS OF QUANTITIES

BILLS OF QUANTITIES

(a) Preambles

1. The method of measurement of completed work for payment shall be in accordance with “**The Standard Method of Measurement of Building Works for Eastern Africa**” current edition published by The Architectural Association of Kenya, Quantity Surveyors Chapter
2. The Site is situated in (*provide full description where the site is situated, coordinates from the nearest known landmark like a town and its size*)_____ It is approximately _____ Kilometers from Nairobi. Access to the site shall be through _____.

Which is an existing public road. Any damage caused to the surfaces of this road shall be made good at the Contractor's expense. The Contractor shall visit the site and acquaint itself with its nature and position, the nature of the ground, substrata and other local conditions, positions of existing power, water and other services, access roads or any other limitations that might affect his cost or progress. No claim for extras shall be considered on account of lack of knowledge in this respect.

3. The Contractor shall obtain the Architect's approval on the siting of all temporary buildings, spoil heaps, temporary access path, and storage of materials. The Contractor shall also obtain the Architect approval and direction regarding the use of any materials found on the Site.
4. The drawings used in the preparation of these Bills of Quantities can be inspected at the offices of the Procuring Entity or Procuring Entity's Representative during normal working hours. Two sets of the Working Drawings shall be provided to the contractor, but additional copies shall be provided at a cost to be determined by the Engineer.
5. The Contractor shall allow for the payment of all bank charges in connection with the procurement of Bank Guarantees and stamp charges in connection with this contract Agreement.
6. The Contractor shall carry out the various sections of the Works in such an order as the Architect May direct. The Procuring Entity reserves the right to occupy the Works by sections on completion provided that such occupation is considered to be both practical and reasonable and will not interfere with the Works. The Contractor shall allow any costs associated with such occupation.
7. The main Contractor will be fully responsible for paying his Sub-Contractor, but the Procuring Entity reserves the right in very exceptional circumstances to make such payments direct in the interests of the project where the completion thereof might be jeopardized by any dispute or vicariousness between the Contractor and the Sub-Contractor involve.
8. The Contractor shall complete and deliver the Works in the period inserted in the Form of Tender as his time for completion of the Works from the date for Possession, to be agreed with the Engineer. The Contract Period is presumed to have been calculated making due allowance for seasonal inclement weather conditions. No claim for extension of time due to the normal inclement weather for this area shall be entertained.
9. The Contractor shall, upon receiving instructions to proceed with the Works, draw up a Programme and Progress Chart setting out the order in which the Works are to be carried out, with the appropriate dates thereof. This Chart shall be agreed with the Architect and no deviation from the order set out in it will be permitted without the written consent of the Engineer. The Contractor will be responsible for arranging the above programme with all his sub-Contractors and Specialties. The Contractor shall allow in his rates for carrying out this exercise, and for updating it as required.
10. The Contractor shall submit to the Architect on the first day of each week or such longer period as the Architect from time to time direct, a Progress Report and any information for the proceeding period, showing the progress during the period and the up-to-date cumulative progress on all important items of each section or portion of the Works.

11. The Contractor shall arrange for photographs of the Site to be taken by a professional photographer approved by the Engineer. The Photographs shall provide a record of the Site and adjacent areas as prior to the commencement of the Works and shall cover such portion of the works in progress and completion as the Architect shall direct. All prints shall be full plate size, unmounted, and marked on the reverse side with the date of exposure, identification reference and brief description. The copyright of all photographs shall be vested in the Procuring Entity. The negatives and four prints from each negative shall be delivered to the Architect within two weeks of exposure.
12. Figured dimensions are to be followed in preference to dimensions scaled from the Drawings, but whenever possible dimensions are to be taken on the Site or from the buildings. Before any work is commenced by Sub-Contractors or Specialist Firms, dimensions must be checked on the site comparable dimensions shown on the drawings. The Contractor shall be responsible for the accuracy of such dimensions.
13. Prior to commencement of any work the Contractor is to ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, waterpipes or other services in the area and he shall make whatever provisions may be required by the Authorities concerned for the support and protection of such services. Any damage or disturbance caused to any services shall be reported immediately to the Architect and the relevant Authority and shall be made good to their satisfaction at the Contractor's expense. Where appropriate the Contractor shall open up the ground in advance of the main work by hand digging if necessary, to locate precisely the position and details of the services which are likely to affect his operations.
14. The Contractor shall include in his prices for the transport of materials, workmen, etc./, to and from the site of the proposed works, at such hours and by such route as are permitted by the Authorities.
15. The Contractor will be required to make good, at his own expense and damage he may cause to the present road surface and pavements within or beyond the boundary of the Site, during the period of the works. All existing paths, storm water channels, etc., that may be destroyed or damaged during the progress of the Works, shall be reinstated by the Contractor to the satisfaction of the Engineer.
16. The Contractor is to allow for complying with all instructions and regulations of the Police Authorities.
17. All water shall be fresh, clean and pure, free from earthly, vegetable or organic matter, acid or alkaline substances in solution. The Contractor shall provide at his own risk and cost all water for use in connection with the Works, (including works of subcontractors). If need be, he shall make arrangements with the Local Water Authority for the installation of a separate meter for all water used by him throughout the Contract and pay all cost and fees in connection therewith. He shall also provide temporary storage tanks and tubing, etc., as may be necessary, and clear away at completion.
18. The Contractor shall provide all artificial lighting and power for his own use on the Works, (including Sub – Contractor's) including all temporary connections, wiring, fittings, etc., and clearing away on completion. The Contractor shall pay all fees and obtain all permits in connection therewith.
19. The Contractor shall constantly keep on the Works a Literate English-speaking Agent or Representative, competent and experienced in the kind of work involved, who shall give his whole time to the superintendence of the works. (Including works of sub – contractors). Such Agent or Representative shall receive on behalf of the Contractor directions and instructions from the Engineer, and such directions and instructions shall be deemed to be given to the contractor in accordance with the Conditions of Contract. The Agent shall not be replaced without the specific approval of the Engineer.
20. The Contractor shall ensure that the safety of his work people and all authorized visitors to the site are protected at all times. In particular, there shall be the proper provision of guard-rails to scaffolding, protection against falling materials, tools on site, dust, nail and other sharp objects. The site shall be kept tidy and clear of dangerous rubbish. The Architect shall be empowered to suspend work on site should it be considered this condition is not being observed and no claim arising from such suspension will be allowed.
21. The areas as available to the Contractor for work yards, offices and other facilities shall be directed by the Architect and any existing features to remain shall be protected from damage throughout the Contract Period and handed back in good condition when they are vacated at the end of the Contract. If additional areas are required, the contractor shall source them at own cost.

22. The Contractor shall give the Architect reasonable notice of the intention to set out or take levels for any part of the Works so that arrangements may be made for checking the work. The accuracy of setting out and leveling shall be within the tolerances specified in the Specifications or on the Drawings. The checking of setting out or leveling by the Architect shall not relieve the Contractor of his duties or responsibilities under the Contract.
23. The Contractor must take steps necessary to safeguard and shall be held fully responsible for any damage caused to existing and adjacent property, including buildings that are not a subject of demolition. He shall make good at his own cost damage to the persons and property caused there on, and he shall indemnify the Procuring Entity against any loss or claim that may arise.
24. The Contractor shall take such steps and exercise such care and diligence as to minimize nuisance arising from dust, noise or any other cause to the occupiers of the existing and adjacent property. He must provide such temporary and special screens and tarpaulins or gummy bags, hoarding, barriers, warning signs etc. as he considers necessary and sufficient for the protection of the existing and adjacent property and or prevention of nuisance etc. as directed by Engineer.
25. The Contractor's attention is drawn to the standards levy order which was amended on 15th October 1998. Legal notice No. 154 of 1998. The Contractor is required to pay a monthly level of 0.2% of his factory price of construction works with effect from January 1999. Tenderer shall allow for this in the build-up of his rates.
26. The Contractor shall provide temporary sheds, offices, mess rooms, sanitary, accommodation and other temporary buildings for the use of the contractor and sub-contractors, including lighting furniture equipment and attendance.
27. The contractor shall provide/build labor camp sites as to be agreed with the Engineer. Labor camps shall be complete with sanitary accommodation and fencing gates.
28. The Contractor must provide the necessary toilet facilities to the requirement and satisfaction of the Health Authorities and maintain the same in a thoroughly clean and sanitary condition and pay all conservancy fees during the period of the Works and remove when no longer required.
29. The Contractor shall provide at his own risk and cost all watching and lighting as necessary to safeguard the Works, Plant and materials against damage and theft.
30. The Contractor shall provide all necessary hoists, tackle, plant, equipment, vehicles, tools and appliances of every description for the due and satisfactory completion of the Works and shall remove the same on completion. All such plant, tools and equipment shall comply with all regulations in force throughout the period of the Contract and shall be altered or adopted during the Contract period as may be necessary to comply with any amendments in or additions to such regulations.
31. Provide, erect, and maintain all necessary scaffolding, sufficiently strong and efficient for the due performance of the works, including Sub-Contract Works, provide special scaffolding as required by Sub-Contractors, alter and adopt all scaffolding as and when required during the Works, and remove on completion. No scaffolding is measured here in after and the Contractor must allow in his rates for this.
32. The Contractor shall take all necessary precautions such as temporary fencing, hoarding, fans, planked footways, guard-rails, gantries screen, etc., for the safe custody of the Works, materials and public protection and adjacent properties.
33. Cover up all and protect from damage, including damage from inclement weather, all finished work and unfixed materials, including that of Sub-Contractors, etc., to the satisfaction of the Architect until the completion of the Contract.
34. The Contractor shall, after completion of the works, at his own expense, remove and clear away all surplus excavated demolition materials, plant, rubbish and unused materials and shall leave the whole of the Site and Works in a clean and tidy state to the satisfaction of the Engineer, sheds, camps, etc. Particular care shall be taken to leave clean all floors and windows and to move all paint and cement all rubbish and dirt as it accumulates. The Contractor is to find his own dump and shall pay all charges in connection therewith.

35. Concrete test cubes shall be prepared in a set of three, as described including testing fees, labor and materials, making molds, transport, handling, etc. Allow in your rates for making at least four cubes on each occasion, from different batches; the concrete being taken from the point of deposit.
36. The Contractors shall furnish at the earliest possible opportunity before work commences, and at his own cost, any samples of materials and workmanship that may be called for by the Architect for the approval or rejection, and any further samples in the case of rejection, until such samples are approved by the Engineer. Such samples, when approved, shall be the minimum standard for the work to which they apply. The procedure for submitting samples of materials for testing or approval and the method of marking for identification shall be as laid down by the Engineer. The Contractor shall allow in his Tender for such samples and tests, including those in connection with his Sub-Contractors work.
37. The Contractors' attention is drawn to the Finance Bill of the year 2000/2001 on withholding tax on contractual payment section 35(7)(i)(ii) which became effective on 1st July 2000. A 3% withholding tax will be applicable to all interim payments exceeding Kshs.....for work done in respect of building or civil works.
The contractor shall allow for any costs arising resulting there from in the build-up of rates.
38. Blasting will only be allowed with the express permission of the Architect in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost, in accordance with any Government regulations in force for the time being, and any special regulations laid down by the Architect governing the use and storage of explosives.
39. The National Construction Authority is a state corporation established under the national construction authority Act No.14 of 2011. The broad Mandate of the Authority is to oversee the construction industry and coordinate its development. The National Construction Authority Regulations 2014 with an effective date of 6th June 2014, regulation 25, - Allow 0.5% of the tender sum/contract sum for construction levy.
40. The Contractor attention is drawn to Finance Bill of 1993 where VAT was introduced in all contracts for construction services. The tenderer is also drawn to VAT Act Cap 476 clause 19(9). The tenderer must allow for VAT 1.19 as instructed elsewhere.
41. The contractor shall allow and pay for all insurance to cover risks and indemnities required Items 17 and 18 of the Conditions of contract and also specified in the Special Conditions of Contract.

BILL NO. 1 - PRELIMINARY ITEMS

ITEM No.	DESCRIPTION	AMOUNT
1.	Employer The “Employer” shall be deemed to mean Murang’a University of Technology, P. O Box 75 - 10200, MURANG’A, KENYA	
2.	Contractor The term “Contractor” shall mean the person(s) named as contractor in the Form of Tender accepted by the Procuring Entity.	
3.	Engineer The term “Engineer.” wherever used in these Bills of Quantities shall be deemed to imply the Engineer as defined in Condition 1 of the Conditions of Contract or such person or persons as may be duly authorized to represent him on behalf of the Employer.	
4.	Architect The term "Architect" shall be deemed to mean University of Nairobi Enterprise Services (UNES), P.O. Box 30197 - 00100, TEL: +254 02 310900, NAIROBI, KENYA	
5.	Quantity Surveyor The term "Quantity Surveyor" shall be deemed to mean UNES	
6.	Electrical Engineer The term "Electrical Engineer" shall be deemed to mean UNES.	
7.	Mechanical Engineer The term "Mechanical Engineer" shall be deemed to mean UNES.	
8.	Civil & Structural Engineer The term "Civil & Structural Engineer" shall be deemed to mean UNES	
9.	The Landscape Architect The term "The Landscape Architect" shall be deemed to mean UNES	
10.	Acoustic Architect The term "Acoustic Architect" shall be deemed to mean UNES	
11.	Environmental/Green Building Expert The term "The Environmental/Green Building Expert" shall be deemed to mean UNES	
12.	Form of Contract The Conditions of Contract comprise the STANDARD PUBLIC PROCUREMENT AND ASSET DISPOSAL TENDER DOCUMENT AND FORMAT FOR USE BY PUBLIC ENTITIES AND STAKEHOLDERS EFFECTIVE 21 ST APRIL, 2021 (Revised in 22 nd April 2022) prepared by the PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA). All Particular Conditions to the contract shall be as listed in the contract document and shall take precedence over the General conditions of contract.	

13.	<p>Office for the Architect</p> <p>The Contractor shall provide, or erect and maintain an approved lock-up office for the sole use of the Architect and his own site staff. The office, which will have a total floor area of not less than 50 square metres, will be divided into two separate interconnected offices. Services to be provided shall include a telephone, water sanitary and electrical supply and drainage. The offices shall be supplied with furniture and equipment that shall include:</p> <p>4 No. desks with chairs; 1 No. large table with sufficient number of chairs; drawing table along the full length of one side with plan drawers and drawing stools: 4 No. waste paper baskets: sufficient number of pin boards: and any additional furniture and fittings as may reasonably be required during the Contract period. The Contractor shall provide the Architect and site staff with computer sets or laptops, printers and telephones all that are necessary for project use.</p> <p>The office furniture and equipment shall all be to the approval of the Engineer. The Contractor shall also provide all labor, equipment and consumable stores equipment throughout the currency of the contract.</p>	N/A
14.	<p>Photographs of the Site</p> <p>The Contractor shall arrange for photographs of the works to be taken by a professional photographer approved by the Engineer. The Photographs shall provide a record of the Site and adjacent are as prior to the commencement of the Works and shall cover such portion of the works in progress and completion as the Architect shall direct.</p>	applicable
15.	<p>Signboard</p> <p>Provide a signboard not less than 30 square meters in size of a design type, and with lettering and coloring and in a position approved by the Engineer. The signboard shall be for the display of the Main Contractor's name and the names of all his Sub-Contractors, with the Procuring Entity's name painted thereon. All Consultants names be printed in letters not exceeding 50 mm high. No other signboard or advertising shall be allowed. The signboard shall be fully maintained during the Contract Period and shall be pulled down and removed at the end of the contract.</p>	N/A
16.	<p>Protection of existing services</p> <p>The Contractor shall ascertain from the relevant Authorities the exact position, depth and level of all existing electric cables, waterpipes or other services in the area and he shall make whatever provisions may be required by the Authorities concerned for the support and protection of such services. Any damage or disturbance caused to any services shall be reported immediately to the Architect and the relevant Authority and shall be made good to their satisfaction at the Contractor's expense.</p>	applicable
17.	<p>Public roads, paths, storm water channels, etc.</p> <p>The Contractor shall make good, at his own expense any damage he may cause to the present road surface and pavements within or beyond the boundary of the Site, during the period of the works. All existing paths, storm water channels, etc., that may be destroyed or damaged during the progress of the Works shall be reinstated by the Contractor to the satisfaction of the Engineer.</p>	applicable
18.	<p>Water for the works</p> <p>The Contractor shall provide at his own risk and cost all water for use in connection with the Works, (including works of sub-contractors)</p>	N/A
19.	<p>Lighting and power for the works</p> <p>The Contractor shall provide all artificial lighting and power for his own use on the Works, (including Sub – Contractor's) including all temporary connections, wiring, fittings, etc., and clearing away on completion.</p>	N/A

20.	Safety of his work people The Contractor shall ensure that the safety of his work people and all authorized visitors to the site are protected at all times. In particular, there shall be the proper provision of guard-rails to scaffolding, protection against falling materials, tools on site, dust, nail and other sharp objects.	applicable
21.	Temporary sheds, offices, mesh rooms etc. for the contractor The Contractor shall provide temporary sheds, offices mesh rooms, sanitary, accommodation and other temporary buildings for the use of the contractor and sub-contractors, including lighting furniture equipment and attendance	N/A
22.	Security for the Works The Contractor shall provide at his own risk and cost all watching and lighting as necessary to safeguard the Works, Plant and materials against damage and theft.	applicable
23.	Scaffolding Provide, erect and maintain all necessary scaffolding, sufficiently strong and efficient for the due performance of the works, including Sub-Contract Works, provide special scaffolding as required by Sub-Contractors, alter and adopt all scaffolding as and when required during the Works, and remove on completion.	N/A
24.	Concrete test cubes Concrete test cubes shall be prepared in a set of three, as described including testing fees, labor and materials, making molds, transport, handling, etc. Allow in your rates for making at least four cubes on each occasion, from different batches; The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the Engineer The Contractor shall allow in his tender for such samples	N/A
25.	Samples of materials and workmanship The Contractor shall furnish at the earliest possible opportunity before work commences, and at his own cost, any samples of materials and workmanship that may be called for by the Architect for the approval or rejection, and any further samples in the case of rejection, until such samples are approved by the Engineer. Such samples, when approved, shall be the minimum standard for the work to which they apply.	applicable
26.	Construction levy The National Construction Authority is a state corporation established under the national construction authority Act No.14 of 2011. The broad Mandate of the Authority is to oversee the construction industry and coordinate its development. The National Construction Authority Regulations 2014 with an effective date of 6th June 2014, regulation 25, - Allow 0.5% of the tender sum/contract sum for construction levy.	applicable
27.	Insurance The contractor shall allow and pay for all insurance to cover risks and indemnities required Items 18 of the Conditions of Contract and also as specified in the Special Conditions of Contract.	applicable
28.	Provisional Sums In the final account all Provisional Sums shall be deducted, and the value of the work properly executed in respect of them upon the Engineer's order added to the Contract Sum.	applicable
29.	Visit the site The Contractor is recommended to visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.	applicable

30.	<p>Government Acts, Orders and Regulations Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular, the Contractor's attention is drawn to the provisions of the Factory Act and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople.</p> <p>The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labour, labour camps, passes for transport, etc. It is most important that the Contractor, before tendering, shall obtain from the relevant Authority the fullest information regarding all such regulations and/or restrictions which may affect the organization of the works, supply and control of labour, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be entertained.</p>	applicable
31.	<p>Materials obtained from the excavations Materials of any kind obtained from the excavations shall be the property of the Employer. Unless the Engineer directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the Engineer Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed.</p>	applicable
32.	<p>Temporary hoarding The Contractor shall provide, erect, and maintain throughout the course of the Contract and thereafter clear away and make good temporary hoarding 3000 mm high above ground consisting of; 100 x 50 mm timber posts at 1800 mm centres firmly founded and secured, 75 x 50 mm horizontal timber rails at 900 mm centers, painted GCI sheets, proper timber gates with suitable locks. Defined by the Engineer.</p>	N/A
33.	<p>Use of the site The Contractor shall not use the site for any other purpose other than carrying out the works. He shall not permit or display any advertisement without the consent of the Engineer.</p>	N/A
34.	<p>Survey equipment The Contractor should provide and maintain survey equipment or and specialized tools (total station and engineer's level together with tripods staff, batteries, etc.) onsite at all times during construction at his own cost.</p>	applicable
35.	<p>Contractor's rates The Contractor 's rates for any item shall be deemed to include all costs involved in the execution of that particular item which include the cost, transportation, and handling of materials, fixing, taxes and levies and for complying with other conditions of contract except where otherwise priced separately</p>	applicable
36.	<p>Contractor's Agent or Representative The Contractor shall constantly keep on the works literate English-speaking Agent or Representative, competent, and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Engineer and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	applicable

37.	Clean and leave the whole of the Site and Works Clean and flush all gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole of the buildings watertight, clean, perfect and fit for occupation to the approval of the Engineer	applicable
	TOTAL CARRIED TO GRAND SUMMARY	

SECTION VI- A

GENERAL SPECIFICATIONS

GENERAL DESCRIPTION OF MATERIALS AND WORKMANSHIP

The following apply to all sections hereafter.

ALTERATIONS, ADDITIONS AND EXTENSIONS

In alterations or extensions to existing works, buildings and/or external works, new work is to match up in all respects to the existing work unless otherwise specified, shown on the Drawings or approved before - hand by the Architect.

QUALITY, SAMPLES, TESTING AND APPROVAL

MATERIALS

All materials, commodities, components and equipment are to be new and unused unless otherwise specified or approved by the Architect. Handle, store, fix and protect all commodities with care to ensure that they are in perfect condition when incorporated into the works and handed over on completion.

MANUFACTURER'S RECOMMENDATIONS

Handling, storage and fixing of every commodity shall be in accordance with the printed or written recommendations of the manufacturer and/or supplier. Supply the Architect with copies of manufacturers' recommendations. Inform the Architect if the manufacturers' recommendations conflict with any other specified requirements, and obtain his instructions before proceeding.

STANDARDS

Where commodities or workmanship are specified by reference to British Standard (B.S) or codes of practice (C.P) or International (I.S.O) or Kenyan Standard or other Standards, such standards are deemed to be the latest published at the time of tendering. The Contractor will be deemed to have read and understood the standards specified, and no claim for want of knowledge will be allowed. The substitution of commodities or standards of workmanship complying with other standards may be allowed at the discretion of the Architect, but application for permission for such substitution must be made in writing in sufficient time to allow adequate investigation. Obtain certificate of Compliance with standards and supply to the Architect on request. Where there is reference to British Standard (B.S) or codes of practice (C.P) or International (I.S.O) or any other Standards, the Contractor will be deemed to have read and understood that the equivalent standards published by the Kenya Bureau of Standards would be the applicable substitute.

LOCAL CONDITIONS

All materials, commodities, components and equipment must be suitable for use in tropical climates. SAMPLES

Where samples of commodities or specimens of finished work are specified, submit samples or specimens to the Architect and obtain his approval before confirming orders or carrying out the work. Retain approved samples and specimens on site for comparison with the finished work. Finished work must conform in all respects with the samples or specimens approved. Remove samples and specimens when no longer required. The cost of supplying samples and specimens may form part of the finished work where approved by the Architect.

GENERAL DESCRIPTIONS OF MATERIALS AND WORKMANSHIP

The following apply to all sections hereinafter.

DEMOLITIONS AND ALTERATIONS

GENERALLY

The contractor is required to visit the existing building and ascertain for himself the nature of the Works and no claim arising from want of knowledge in this respect will be allowed. The dimensions and quantities given in this section are approximate and given for guidance only and the Contractor is referred to the Site to ascertain the exact nature and extent of the works,

The items of pulling down and alterations are to include for both labour and materials and for shoring, needling and strutting and temporary works in connection therewith. The contractor must allow in his pricing for making good all works disturbed in all trades and for carting away all debris arising.

The Contractor must give all the necessary notices and must exercise due care in the demolitions. He must not collapse large sections of walls, floors, etc., and must provide all necessary shoring and supports during the demolitions.

During demolition works, the Contractor shall keep the debris constantly watered to minimise the dust arising and this shall be included in his prices.

The Contractor is to erect dust-proof screens to the approval of the Architect where deemed necessary and to remove them on completion of the work, all to the Architect's satisfaction.

All re-usable materials arising from the demolitions, unless specifically stated otherwise, are to become the property of the Client, the contractor may however, re-use the same and give credit for the value of materials re-used after getting written approval from the architect.

All materials, including rubbish shall be removed from the Site as soon as possible.

INTERPRETATION OF TERMS

'Demolish' shall be deemed to mean cutting away, breaking up, demolishing, pulling down, taking down, removing, etc. as the context requires and shall include in all cases temporarily strutting and supporting and making good remaining work as necessary and clearing away and removing from Site all debris, etc.

'Remove' shall mean taking down, hacking up, breaking down, removing etc., and clearing away from Site and all other expenses thereby entailed.

"Make good" shall be deemed to mean all making good, fitting, facing, plastering, paving, repairing and painting to match and jointing to remaining existing work.

To 'match' shall mean to be all equal to relevant existing work in design, workmanship and all other respects.

"Re-fix" shall apply to existing materials arising from the Works and shall mean take from store and fix in new position, including making good, repairing and adjusting as necessary.

A. UNDERPINNING

FOUNDATIONS

The following sequence of construction will be followed for any underpinning work to foundations: -

Excavate under foundation footing to a length of 1000mm by 500mm wide by 500mm deep, 2000mm centres. Fill excavated cavity with concrete 1:3:6

Allow the concrete to set for two days

Repeat the above operation for the next panels until the whole foundation is underpinned. Break off the projecting foundation and leave flush with mass concrete surface.

SUPPORT TO EXISTING SLAB

Prop up the first floor slab next to the wall to be demolished until new walling or column is built to carry universal beam. Erect in position universal beam to support existing slab as designed.

Remove props seven days after erection of beam.

B. EXAMINE THE SITE

The Contractor is assumed to have visited and examined the Site carefully and ascertained for himself its nature and the kind of materials to be excavated.

C. EXCAVATIONS

Excavations shall be to the widths and depths indicated on the Drawings subject to the rules of working space or such lesser or greater depths as the Architect may deem necessary and so instruct the Contractor in order to obtain satisfactory foundations.

Any difference in the quantity of work actually executed under such instructions and that provided in the Bills of Quantities shall be measured and valued by the Quantity Surveyor as a Variation under the relevant Conditions of Contract.

If, however, the Contractor excavates to any greater depths or widths than are shown on the Drawings or directed, then the Contractor shall at his own expense, fill in such extra depth and width with concrete similar to that described for foundations to the Architects satisfaction.

D. BOTTOMS OF EXCAVATIONS TO RECEIVE FOUNDATION

The Contractor shall report to the Architect when secure bottoms to the excavations have been obtained. Any concrete or other work executed before the excavations have been inspected and approved shall, if so directed, be removed and new work substituted after the excavations have been approved, all at the contractors' expense.

The surface of the bottoms to excavations to receive foundations shall be levelled or graded to falls as required.

A. SIDES OF EXCAVATIONS

Sides of excavations shall be maintained vertical by means approved by the Architect and the Contractor shall allow for keeping same free from fallen materials in his rates for excavations.

The contractor shall also allow for keeping excavations free from, water and mud by baling, pumping or otherwise in his rates for excavations.

B. ROCK

Excavations in rock shall exclude all materials which can be removed by hand and does not necessarily require the use of compressors or other mechanical equipment although the Contractor may use such equipment to loosen the material for ease of its removal. All top soils, black cotton and other clay soils, Murram, stone and other fill and similar materials will NOT be classified as rock.

Rock has been measured hereafter as extra over excavation for excavating in soft or hard rock.

Soft rock shall be deemed to mean any material which cannot reasonably be removed without the use of mechanical plant such as rippers, compressors, traxcavators, but which does not require drilling, wedging or blasting. Local tuffs, Magadi highly-consolidated laterite, weathered, lavas, boulders or outcrops of harder rock not exceeding one cubic metre in volume, Nairobi building stone and similar materials shall be classified as soft rock.

Hard rock shall be classified as material which is massive and geologically homogeneous and which requires the use of drilling, wedging or blasting for its removal such as blackstrap or similar material.

The Engineer's decision shall be final with regard to the classification of excavated materials.

C. STARTING LEVEL

Unless otherwise described, the starting level of all excavations has been measured from the level remaining after completion of reduced level excavation. However, the Contractor's prices should include for carrying out the excavation work in any alternative sequence that he may require.

D. BLASTING

No blasting will be permitted without the prior approval of Local Authorities and the Architect.

E. CART AWAY

All surplus excavated materials where so directed and all rubbish are to be removed from the Site and the Contractor is to find his own dump and shall pay all charges.

F. BORROW PITS

No borrow pits will be allowed to be opened on the site.

A. FILLING OBTAINED FROM THE EXCAVATIONS

Filling obtained from surplus excavation material will only be incorporated if suitable material arises and it is to be free from all weeds, roots, vegetable soil or other unstable materials and is to be filled in layer each of not more than 250mm finished thickness. Each layer to be wetted and consolidated as described hereafter

B. HARDCORE FILLING

Hardcore for filling under floors, etc. shall be good hard stone ballast or quarry waste to the approval of the Architect broken to pass not greater than 150mm ring or to be 75% of the finished thickness of the layers being compacted, whichever is the lesser. Hardcore shall be free from all weeds, roots, vegetable soil, clay, black cotton soil or other unstable materials.

It shall be well graded with smaller stones and fine materials to give a dense compact mass after consolidation. Sufficient fine material shall be added to each layer to give gradation of materials as necessary to obtain a solid compact mass after rolling. Hardcore filling is to be laid in layers each of consolidated thickness not exceeding 250mm. Each layer shall be compacted by at least 8 passes of 10 tonne smooth-wheeled roller or a 2 tonne vibrating roller until all movement ceases. Sufficient water is to be added to obtain maximum compaction to the Architect's approval. To each layer a 25mm thick layer of sand complying with the specification for fine aggregate for concrete shall be spread over the surface and forced into the hardcore by the use of a vibrating roller weighing not less than 2 tonnes. This operation should be carried out when the materials are dry and repeated whilst the sand is well watered. Should all the sand be absorbed the Architect may require a further layer to be applied and the process repeated.

The top surface of the hardcore shall be levelled or graded to falls as required,

and shall then be blinded with a layer of similar material broken to 25mm gauge and finished with a 10 ton smooth- wheeled roller. The surfaces so obtained shall be to the Architect's approval.

C. MATERIALS FOUND IN EXCAVATION

No sand, aggregate, Murram or other materials found in the excavations is to be used in the Works without the written permission of the Architect.

D. RATES FOR EXCAVATIONS

The rates for excavation, including excavation in rock, shall include for trimming, levelling and preparing bottoms and all faces to receive concrete, etc., and for any extra excavation required for planking and strutting.

Prices for excavating in any material encountered unless specifically otherwise described, shall include for handling, etc., of extra bulk after excavating, or before consolidating, any extra excavation required for formwork to planking and strutting, circular work, grubbing up any old drains, roots etc., that may be encountered, for trimming sides and levelling and ramming bottoms, forming stepping's and trimming excavation or filling to embankments and batters as required.

In his prices for the item 'allow for keeping the whole of the excavations free from water' the Contractor shall allow and make provision for keeping the whole of the Works thoroughly drained and clear of water below the lowest level of any part of excavation so long as may be required if considered necessary by the Architect, continuously day and night by petrol or hand pumps or other mechanical appliances, pipes, chutes, dams, manholes, sumps, diversions or any other means necessary for that purpose. Water pumped from the trenches shall not be allowed to run down the road channels but shall be conveyed to the nearest surface water sewer, ditch or river through troughs, chutes or pipes.

A. RATES FOR DISPOSAL

Rates for disposal of excavated material are to include for the selection of spoil as it arises and for all double handling and re-excavation from spoil heaps not specifically ordered by the Architect.

B. DIOTHENE SHEETING

Diothene sheeting shall be 500 gauge or 1000 gauge as shown and as produced by plastics Africa Limited, or other equal and approved. Joints in sheeting shall be treble folded with 150mm fold and taped at 300mm intervals with 50mm wide black plastic adhesive tape as manufactured by Cellotape Limited. The sheeting shall not be stretched but shall be laid loose with sufficient wrinkles to permit shrinkage up to 15%.

C. CUTTING DOWN TREES

The contractor must consult the Architect before cutting down or pruning any trees or shrubs encountered on the Site.

CONCRETE WORK

D. ARCHITECT/ENGINEER

For the purposes of the concrete structure, the Structural Engineer hereafter referred to as 'The Engineer' shall be deemed invested with the duties and be the representative of the Architect.

E. CODE OF PRACTICE

All materials, workmanship, tests and performances in connection with reinforced concrete work are to be in conformity with the latest edition of the British Standard Code of practice B.S (8110 for 'The Structural Use of Concrete') where not inconsistent with these Preambles.

F. SUPERVISION

A competent person approved by the Engineer shall be employed by the Contractor whose duty shall 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, in consultation with the Engineer.

G. CONTRACTOR'S PLANT, EQUIPMENT AND CONSTRUCTION PROCEDURES

Not less than 30 days prior to the installation of Contractor's plant and equipment for processing, handling, transporting, storing and proportioning ingredients, and for mixing, transporting and placing concrete, the Contractor shall submit drawings for approval by the Engineer, showing proposed general plant arrangement, together with a general description of the equipment he proposes to use.

After completion of installation, the operation of the plant and equipment's shall be subject to the approval of the Engineer.

Where these Preambles, the Bills of Quantities or the drawings require specific procedures to be followed, such requirements are not to be construed as prohibiting use by the Contractor of alternative procedures if it can be demonstrated to the satisfaction of the Engineer that equal results will be obtained by the use of such alternatives.

Approval of plant and equipment or their operation, or of any construction procedure, shall not operate to waive or modify any provision or requirements contained in these preambles governing the quality of the materials or of the finished work.

Where suspended floor slabs are to be constructed without expansion joints, concreting is to be in panels of sizes and positions to the approval of the Engineer. To permit setting shrinkages to occur, some panels will be left unconcreted until 7 days or more after main areas have been concreted. The Contractor must include for this method of construction in his pricing.

A. TOLERANCE

On all setting out dimensions of 5 metres and over, a maximum non-accumulative tolerance of plus or minus 5 millimetres will be allowed. On all setting out dimensions under 5 metres, a maximum non-accumulative tolerance of plus or minus 3 millimetres will be allowed. On the cross-sectional dimensions of structural members, unless otherwise required by the Drawings, a maximum tolerance of plus or minus 3 millimetres will be permitted.

The top surface of concrete floor slabs and beams shall be within 6 millimetres of the normal level and line shown on the Drawings. Columns shall be truly plumb and non-accumulative tolerance of 3 millimetres in each storey and not more than 6 millimetres out of plumb in their full height will be permitted. The Contractor shall be responsible for the cost of all corrective measures required by the Engineer to rectify work which is not constructed within the tolerances set out above.

B. MATERIALS GENERALLY

All materials which have been damaged, contaminated or have deteriorated or do not comply in any way with the requirements of these Preambles shall be rejected and shall be removed immediately from the Site at the Contractor's expense. No materials shall be stored or stacked on floors without the Engineer's prior approval.

The sources of supply for all materials used for concrete work shall be approved by the Engineer before these materials are delivered on the Site. All materials shall comply with the requirements of the latest appropriate British Standard unless otherwise agreed with the Engineer whose approval shall be obtained in writing.

The suppliers of materials shall give the Engineer access to their Premises when directed for the purpose of obtaining samples of the materials for testing.

SAMPLES

Samples of materials shall be submitted as soon as possible after the Contract is let. No deliveries in bulk shall be made until the samples are approved by the Engineer. All condemned materials shall be removed from the Site within 24 hours.

Every facility shall be provided to enable the Engineer to obtain samples and carry out tests on the materials and construction. If these tests show that any of the materials or construction does not comply with the requirements of this Specification, the Contractor will be responsible for the cost of the tests and the replacement of defective materials and/or construction.

Samples of all materials proposed to be used shall be submitted to the Engineer and shall be tested, where required, by the Materials Branch of the Ministry of works or other approved testing place, and receive his approval prior to being delivered in bulk upon the Works.

The Contractor's attention is drawn to the fact that the testing of samples of aggregate, sand and cement by the materials Branch, M.O.W., takes time and it is of the utmost importance that the samples should be submitted for testing as soon as possible after the letting of the Contract. The Ministry will not accept any responsibility whatsoever for delay in the commencement of the Contract due to delay on the part of the contractor in submitting samples.

A. CEMENT

Cement, unless otherwise specified, shall be Portland cement of a brand approved by the Engineer and shall comply with the requirements of KS 1725.

A manufacturer's Certificate of Test in accordance with KS 1725 shall be supplied for each consignment delivered to the Site.

Should the Contractor require using cement of the rapid hardening variety, he shall obtain the approval of the Engineer and also obtain any instructions regarding modifications to these Preambles caused thereby. Any additional cost that may be caused by the use of rapid hardening cement shall be at the Contractor's expense.

Cement may be delivered to the Site either in bags or in bulk.

If delivered in bags, each bag shall be properly sealed and be marked with the manufacturer's name and on the Site is to be stored in weather-proof shed of adequate dimensions with a raised floor. Each consignment shall be kept separate and marked so that it may be used in sequence in which it is received. Any bag found to contain cement which has set or partly set, shall be completely discarded and not used in the Works. Bags shall not be stored more than 1,500mm in height.

If delivered in bulk the cement shall be stored in a water-proof silo either provided by the cement supplier or by the Contractor, but in either case the silo shall be to the approval of the Engineer.

B. AGGREGATES

The aggregates shall conform to the requirements of B.S 882 and the sources and types of all aggregates are to be approved in all respects by the Engineer before work commences.

The grading of aggregates shall be one within the limits set out in B.S 882 and as later specified and the grading, once approved, shall be adhered to throughout the Works and not varied without the approval of the Engineer. Fine aggregate shall be clean, coarse, siliceous sand of good, sharp, hard quality and shall be free from lumps of stone, earth, loam, dust, salt, organic matter and any other deleterious substances. It shall be graded within the limits of zone 1 or 2 Table 2 of B.S 882.

Coarse aggregate shall be good, hard, clean approved black trap or similar stone, free from dust, decomposed stone, clay, earthy matter, foreign substances or friable thin elongated or laminated pieces. It shall be graded within the limits of Table 1 of B.S 882 for its respective nominal size.

If in the opinion of the Engineer the aggregate meets with the above requirement but is dirty or adulterated in any manner it shall be screened and/or washed with clean water if he so directs at the Contractor's expense.

Aggregate shall be delivered to the Site in their prescribed sizes or gradings and shall be stockpiled on paved areas or boarded platforms in separate units to avoid intermixing. On no account shall aggregates be stockpiled on the ground.

A. 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.

B. READY-MIXED CONCRETE

Ready-mixed concrete may only be used with the prior permission of the Engineer, subject to special additional conditions laid down by the Engineer.

C. CONCRETE MIXES

Concrete mixes have been described either by the volumetric proportions or by the 28 - day cube strength.

D. CONCRETE STRENGTHS

Concrete mixes shall have the following minimum strengths as given by the Works Cube Test: -

Minimum crushing Strength at 28 Days

	N/mm
Class 40	40
Class 30	30
Class 25	25
Class 20	20

The average strength obtained from cube tests shall be 20% higher than the minimum strength shown above. Works

Cube Test will not be required for class 15 blinding concrete which shall comprise 1:3:6 weights.

Volumetric mixes shall comprise the following:

	Cement/KG	Fine aggregate/CM	Coarse aggregate/CM
1:1:2	50	0.03	0.07
1:1.5:3	50	0.05	0.10
1:2:4	50	0.07	0.14
1:3:6	50	0.10	0.20
1:4:8	50	0.13	0.26

E. MEASURED PROPORTIONS OF CONCRETE

Cement

The quantity of cement shall be measured by weight. When delivered in bags, each batch of concrete is to use one or more whole bags of cement.

Aggregates

Concrete aggregates shall be measured by weight in a weigh batching machine.

Weigh batching machines shall be of an approved type and shall be properly maintained and checked for accuracy at regular intervals.

A. CONCRETE CLASSES 20, 25, 30 & 40

The weights of fine and coarse aggregate to be used in concrete Classes 20 to 25 shall be limited in accordance with the table below. The proportions of the fine to coarse aggregate and cement which the Contractor proposes to us for each of the mixes specified shall first be approved by the Engineer. The Contractor will then be required to prepare preliminary Test Cubes and have these cubes tested as described for Work Cube Tests. The test results should be submitted to the Engineer in sufficient time for further tests to be carried out should they prove unsatisfactory. Cube strengths in the preliminary tests must show crushing strengths at least 30% higher than the minimum strengths specified for Works Cube Test. If the Contractor is unable to produce specified cube strengths, he will be required at his own cost to increase the cement content of the mix until satisfactory results are produced.

The Engineer may require at any time during the contract the proportions of fine to coarse aggregate to be altered in order to produce a mix of greater strength or improved workability and providing that the total proportions of aggregate to cement remain unchanged, no claim for additional cost will be considered.

MINIMUM CEMENT CONTENT

Concrete class	Minimum Cement Content by weight to combined total weight of aggregate
Class 40	1 to 4.5
Class 30	1 to 5.5
Class 25	1 to 5.5
Class 20	1 to 7
Class 15	1 to 10

B. WATERPROOF CONCRETE

Where waterproof concrete is specified, "Sealopruf Integral Water-Proofing Compound" and "Sealoplaz Concrete Plasticiser" as manufactured by Sealocrete Group Sales Ltd., Atlantic Works, Hythe Road, London NW 10 5RD, England, are to be added to the mixing water strictly in accordance with the manufacturer's instructions and at the rate of 0.50 litres and 0.25 litres respectively to each 50 kg bag of cement to which the aggregates have already been added and mixed. Not more than 25 litres of water per 50 kg bag of cement are to be used unless otherwise approved by the Engineer.

C. EXPANSION JOINTING

Expansion joint filler shall be "Flexcell" as manufactured by Expandite Ltd., or "Resilex" as manufactured by Evomastics Ltd., or other equal and approved.

A. JOINT SEALER

Sealers shall be either hot or cold applied. Hot applied sealers shall comply with B.S 2499. Cold mastics shall be applied by gun and where more than 12mm deep shall include filling with loose packing yarn to within 2mm from the outer face. All joint sealers are to be approved by the Engineer prior to their use.

B. WATERBAR

Water bar shall be as shown on the drawings or as described in the Bills of Quantities. PVC water bar shall be as manufactured by Expandite Limited, or other approved type and shall be provided in the positions indicated on the Drawings. Joints shall be heat welded in accordance with the manufacturer's instructions and where the water bar is to be fixed vertically, metal clips as manufactured by the supplier of the water bar or of other approved design shall be provided to suspend the water bar from the reinforcement.

Where waterproof concrete is used, the Contractor shall adhere strictly to the position and type of construction joints as detailed on the drawings. Any deviation from this procedure or the provision of additional construction joints will require the prior approval of the Engineer and any additional water bar so required will be at the Contractor's expense.

Formwork shall be designed with sufficient timber formers and blocking pieces to support the water bar and to ensure that it is not displaced during concreting. In the case of horizontal joints in vertical walling and similar members, the formwork shall be so constructed as to permit the starter or up stand of concrete surrounding the lower half of the water bar to be poured in the same operation as the slab or other concrete from which it springs.

Formwork to walls or similar members where the water bar is positioned at the base of the lift shall have sufficient temporary openings not less than 300mm square at approximately 200mm above the level of the water bar to permit checking that the water bar is correctly positioned and not displaced during concreting.

No concreting will be permitted to portions where up stand starters forms an integral part until the formwork to the starter has been fixed and approved.

C. TESTING EQUIPMENT

The Contractor shall provide the following equipment for carrying out control tests on the Site. Straight edges 3 metres and 1-metre-long for testing the accuracy of the finished concrete;

A glass graduated cylinder for use in the silt test for organic impurities in the sand; Slump test apparatus;

Four 150mm steel cube moulds with base plates and tampering rods to B.S 1881

D. WORKS CUBE TESTS

Works cubes are to be made at intervals as required by the Engineer, but as a minimum shall be 1 sample (4 cubes) per 25m³ of concrete but not less than 1 sample for each day of concreting.

The contractor shall provide a continuous record of concrete work. The cubes shall be made in approved 150mm moulds in strict accordance with the Code of Practice.

Four cubes shall be made on each occasion.

Each cube shall be marked with a distinguishing number (numbers) to run consecutively and the date and a record shall be kept on site giving the following particulars:

Cube No.

Date Made

Location in work

- day test Date

Strength

28 - day test

Date

Strength

Cubes shall be forwarded, carriage paid, to an approved testing authority, in time to be tested one at 7 days and the remaining three at twenty-eight days. No cube shall be dispatched within 3 days of casting.

Copies of all Works Cube Tests shall be forwarded directly to the Engineer by the testing laboratory.

If the strengths required above are not attained, and maintained throughout the carrying out of the contract, the Contractor will be required to increase the proportion of cement and/or substitute better aggregates so as to give concrete which does comply with the requirements of the Contract. The Contractor may be required to remove and replace at his own cost any concrete which fails to attain the required strength as ascertained by Works Cube Tests.

A. MIXING AND PLACING OF CONCRETE

The concrete shall be mixed only in approved power-driven mixers of a type and capacity suitable for the work, and in any event not smaller than 0.40/0.28 cubic Metre capacity.

The mixer shall be equipped with an accurate water measuring device. All materials shall be thoroughly mixed dry before the water is added and the mixing of each batch shall continue for a period of not less than two minutes after the water has been added and until there is a uniform distribution of the materials and the mass is uniform in colour.

The entire contents of the mixed drum shall be discharged before recharging. The volume of mixed materials shall not exceed the rated capacity of the mixer. Whenever the mixer is started, 10% extra cement shall be added to the first batch and no extra payment will be made on this account.

As a check on concrete consistency slump tests may be carried out and shall be in accordance with B.S 1881. The Contractor shall provide the necessary apparatus and carry out such tests as are required. The slump of the concrete made with the specified water content, using dry materials shall be determined and the water to be added under wet conditions shall be so reduced as to give approximately the same slump.

The concrete shall be mixed as near to the place where it is required as is practicable, and only as much as is required for a specified section of the work shall be mixed at one time, such sections being commenced and finished in one operation without delay. All concrete must be efficiently handled and used in the Works within twenty (20) minutes of mixing. It shall be discharged from the mixer direct either into receptacles or barrows and shall be distributed by approved means which do not cause separation or otherwise impair the quality of the concrete.

Approved mechanical means of handling will be encouraged, but the use of chutes for placing concrete is subject to prior approval of the Engineer.

Concrete shall be placed from a height not exceeding 1,500mm directly into its permanent position and shall not be worked along the shutters to that position. Unless otherwise approved, concrete shall be placed in a single operation to the full thickness of slabs, beams, and similar members, and shall be placed in horizontal layers not exceeding 1,500mm deep in walls and similar members.

Concrete in columns may be placed to height of 4 metres with careful placing and vibration and satisfactory results. Where the height of the column exceeds 4 metres suitable openings must be left in the shutters so that this maximum lift is not exceeded.

Concrete shall be placed continuously until completion of the part of the work between construction joints as specified hereinafter or of a part of approved extent. At the completion of a specified or approved part of a construction joint of the form and in the positions hereinafter specified shall be made. If stopping of concreting be unavoidable elsewhere, a construction joint shall be made where the work is topped. A record of all such joints must be made by the Contractor and a copy supplied to the Engineer.

Any accumulation of set concrete on the reinforcement shall be removed by wire brushing before further concrete is placed.

The Contractor shall provide runways for concreting to the satisfaction of the Engineer. Under no circumstances will the runways be allowed to rest on the reinforcement.

Care shall be taken that the concrete is not disturbed or subjected to vibrations and shocks during the setting period.

Mixing machines, platforms and barrows shall be clean before commencing mixing and be cleaned on every cessation of work.

Where concrete is laid on hardcore or other absorbent materials, the base shall be suitable and sufficiently wetted before the concrete is deposited.

COMPACTION

At all times during which concrete is being placed, the Contractor shall provide adequate trained and experienced labour to ensure that the concrete is compacted in the forms to the satisfaction of the Engineer.

Concrete shall not be placed at a rate greater than will permit satisfactory compaction nor to a depth greater than 400mm before it is compacted.

During and immediately after placing, the concrete shall be thoroughly compacted by means of continuous tamping, spading, slicing and vibration. Vibration is required for all concrete of Classes 40, 35, 25 and 20.

Care shall be taken to fill every part of the forms, to work the concrete under and around the reinforcement without displacing it and to avoid disturbing recently placed concrete which has begun to set.

Any water accumulating on the surface of newly placed concrete shall be removed and no further concrete shall be placed thereon until such water is removed.

Internal vibrators shall be to a frequency of not less than 7,000 cycles per minute and shall have a rotating eccentric weight of at least 0.50kg, with an eccentricity of not more than 12mm. Such vibrators shall visibly affect the concrete within a radius of 250mm from the vibrator.

Internal vibrators shall not be inserted between layers of reinforcement less than one and half times the diameter of the vibrators apart. Contact between vibrators and reinforcement and vibrators and formwork shall be avoided.

Internal vibrators shall be inserted vertically into the concrete wherever possible at not more than 500mm centres and shall constantly be moved from place to place. No internal vibrator shall be permitted to remain in any one position for more than ten seconds and it shall be withdrawn very slowly from the concrete.

In consolidating each layer of concrete, the vibrating head shall be allowed to penetrate and re-vibrate the concrete in the upper portion of the underlying layer. In the area where

newly placed concrete in each layer joins previously placed concrete, more than usual vibration shall be performed, the vibrator penetrating deeply at close intervals along these contacts. Layers of concrete shall not be placed until layers previously placed have been vibrated thoroughly as specified.

Vibrators shall not be used to move concrete from place to place in the formwork.

At least one internal vibrator shall be operated for every 1.5 cubic metres of concrete placed per hour and at least one spare vibrator shall be maintained on Site in case of breakdown during concreting operations.

External formwork vibrators shall be of the high frequency low amplitude type applied with the principal direction of vibration in the horizontal plane. They shall be attached directly to the forms at not more than 1,200mm centres.

In addition to internal and external vibration, the upper surface of suspended floor slabs shall be levelled by tamping or vibrating to receive finishes. Vibrating elements shall be of the low frequency high amplitude type operating at a speed of not less than 3,000 r.p.m.

CONSTRUCTION JOINTS

Construction joints shall be permitted only at the positions pre-determined on the Drawings or as instructed on the Site by the Engineer. In general, they shall be perpendicular to the lines of principal stress and shall be located at points of minimum shear, viz, vertically at, or near, mid-spans of slabs, ribs and beams.

Suspended concrete slabs are generally to be cast using alternate bay construction in bays not exceeding 20 metres in length. No two adjacent bays are to be cast within a minimum period of 48 hours of each other. The joints between adjacent bays are to be in positions agreed with the engineer.

Under no circumstances shall concrete be allowed to tail off, but it shall be deposited against stopping - off boards.

Before placing new concrete against concrete already hardened, the face of the old concrete shall be thoroughly hacked, roughened and cleaned, and laitance and loose material removed there from and immediately before placing the new concrete the surface shall be saturated with water and covered with a coat of mortar at least 25mm in thickness composed of cement and fine aggregate in the proportions used in the concrete.

CURING AND PROTECTION

Care must be taken that no concrete is allowed to become prematurely dry and the fresh concrete must be carefully protected within two hours of placing from rain, sun and wind by means of Hessian sacking, polythene sheeting, or other approved means. This protective layer and the concrete itself must be kept continuously damp for at least seven days after the concrete has been placed. The contractor will be required to provide complete coverage of all fresh concrete for a period of 7 days. Hessian or polythene sheeting shall be in the maximum widths obtainable and shall be secured against wind. The contractor will not be permitted to use old cement bags, Hessian or other material in small pieces.

Concrete in foundations and other underground work shall be protected from admixture with falling earth during and after placing.

Traffic or loading must not be allowed on the concrete until the concrete is sufficiently matured and in no case shall traffic or loading be of such magnitude as to cause deflection or other movement in the formwork or damage to the concrete members. Where directed by the Engineer, props may be required to be left in position under slabs and other members for greater periods than those specified hereafter.

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 it has set, the concrete shall be cut out and replaced in accordance with the Engineer's instructions. On no account shall any faulty, honey combed or otherwise defective concrete be repaired or patched up until the Engineer has made an inspection and issued instructions for the repair. The whole of the cost whatsoever, which may be occasioned by the need to remove faulty concrete, shall be borne by the Contractor.

ROD REINFORCEMENT

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

Hot rolled bars for the reinforcement of concrete	To B.S 4449 (metric Units)
Cold worked steel for the reinforcement of concrete	To B.S 4461 (metric units)

FABRIC REINFORCEMENT

To be electrically cross-welded steel wire mesh reinforcement to B.S 4483, 1969 and of size and weight specified. FIXING ROD

REINFORCEMENT

Reinforcement shall be accurately bent to the shapes and dimensions on the Drawings and Schedules and in accordance with B.S 4466. Reinforcement must be cut and bend cold and no welded joints will be permitted unless so detailed.

Reinforcement shall be accurately placed in position as shown on the drawings and before and during concreting, shall be secured against displacement by using No. 18 S.W.G annealed binding wire or suitable clips at intersections and shall be supported by concrete or metal supports, spacers or metal hangers to ensure the correct position and cover.

No concreting shall be commenced until the Engineer has inspected the reinforcement in position and until his approval has been obtained. The Contractor shall complete in duplicate the Structural Concrete Approval Form (SCAF) as per sample in these preambles, and under no circumstances shall concreting be commenced until his form has been signed by the Engineer.

The Contractor shall give two clear days' notice of his intention to concrete.

The Contractor is responsible for maintaining the reinforcement in its correct position, according to the Drawings, before and during concreting. During concreting, a competent steel fixer must be in attendance to adjust and correct the position of any reinforcement which may be displaced. The vibrators are not to come into contact with the reinforcement.

POSITION AND CORRECTNESS OF REINFORCEMENT

Irrespective of whether any inspection and/or approval of the fixing of the reinforcement has been carried out as above, it shall be the Contractor's sole responsibility to ensure that the reinforcement complies with the details on the Drawings or Schedules and is fixed exactly in the positions shown therein and in the positions to give the prescribed cover. The Contractor will be held entirely responsible for any failure or defect in any portion of the reinforced concrete structure and including any consequent delay, claims, third party claims, etc., where it is shown that the reinforcement has been incorrectly positioned or is incorrect in size or quantity with respect to the detailed Drawings or Schedules.

SPACER BLOCKS

Spacer blocks of approved size and shape made of concrete similar to that used in the surrounding construction and fixed to the reinforcement or formwork by No. 18 S.W.G wires set into the spacer blocks or other approved means shall be provided where necessary to ensure that the requisite cover is obtained. Where hollow concrete block construction is used, spacer blocks are to be provided as shown on the drawings. These will consist of concrete blocks as described above made to fit the width of the rib less 3mm tolerance and with single or double grooves (depending on the number of reinforcement bars used per rib) in the top surface with wire ties at each groove.

CONCRETE COVER TO REINFORCEMENT

Unless otherwise directed, the concrete cover to rod reinforcement over main bars in any face shall be:-

Foundations against earth face	75mm
Foundations against building	50mm
Columns	40mm
Beams	25mm
Slabs	15mm

FIXING FABRIC REINFORCEMENT

The fabric shall be free from scale, rust, grease or other substance likely to reduce the bond between the steel and the concrete and shall be laid minimum 300mm laps and bound with No. 18 S.W.G annealed iron wire.

PROJECTION REINFORCEMENT

Where reinforcement projects from a concrete section of the structure and this reinforcement is expected to remain exposed for some time, it is to be coated with a cement grout to prevent rust staining on the finished concrete. This grout is to be brushed off the reinforcement prior to the continuation of concreting.

CHASES, HOLES, ETC IN CONCRETE

The Contractor shall be responsible for the co-ordination with the Electrical and other sub-contractors for incorporating electrical conduits, pipes, fixing blocks, chases, holes and the

like in concrete members as required and must ensure that adequate notice is given to such sub-contractors informing them when concrete members incorporating the above are to be poured. The Contractor shall submit full details of these items to the Engineer for approval before the work is put in hand. All fixing blocks, chases, holes, etc., to be left in the concrete shall be accurately set out and cast with the concrete.

POSITION OF ELECTRICAL CONDUITS

Unless otherwise instructed by the Engineer, all electrical conduits to be positioned within the reinforced concrete shall be fixed inside the steel cages of beams and columns and between the top and bottom steel layers in slabs and similar members.

The proposed position of all electrical conduits 25mm and over in diameter which are to be enclosed in the concrete shall be shown accurately on a plan to be submitted by the Engineer, whose approval shall be obtained before any such conduit is placed. The dimensions and positions of all holes, sleeves, or ducts required in the structure for electrical cables or conduits shall be advised to the Engineer in sufficient time for them to be approved and shown on the structural drawings. No other holes or sleeves shall be cut on site without the Engineer's prior approval.

FORMWORK

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

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

CONSTRUCTION OF FORMWORK

All formwork shall be of sufficient thickness and with joints close enough to prevent undue leakage of liquid from the concrete and fixed to proper alignment, level and plumb and supported on sufficiently strong bearers, shores, braces, plates, etc., properly held together by bolts or other fastenings to prevent displacement, vibration or movement by the weight of materials, men and plant on same and so wedged and clamped as to permit ease of removal of the formwork without jarring the concrete. Where formwork is supported on previously constructed portions of the reinforced concrete structural frame, the contractor shall by consultation with the Engineer ensure that the supporting concrete structure is capable of carrying the load and/or sufficiently propped from lower floors or portions of the frame to permit the load to be temporarily carried during construction.

Soffites shall be erected with an upward camber of 5mm for each 5 metres of horizontal span or as directed by the Engineer.

Great care shall be taken to make and maintain all joints in the formwork as tight as possible, to prevent the leakage of grout during vibration. All faulty joints shall be caulked to the Engineer's approval before concreting.

The formwork shall be sufficiently rigid to ensure that no distortion or bulging occurs under the effects of vibration. If at any time the formwork is insufficiently rigid or in any way defective the Contractor shall strengthen or improve such formwork as the Engineer may direct.

The Contractor's attention is drawn to the various surface textures and applied finishes required and the faces of formwork next to the concrete must be of such material and construction and be sufficiently true to provide a concrete surface which will in each particular case permit the specified surface treatment or applied finish.

All surfaces which will be in contact with concrete shall be oiled or greased to prevent adhesion of mortar. Oil or grease shall be of a non-staining mineral type applied as a thin film before the reinforcement is placed. Surplus moisture shall be removed from the forms prior to placing of the concrete.

Temporary opening shall be provided at the base of columns, wall and beam forms and at any other points where necessary to facilitate cleaning and inspection immediately before the pouring of concrete. Before the concrete is placed, the shuttering shall be trued - up and any water accumulated therein shall be removed. All sawdust, chips, nails and other debris shall be washed out or otherwise removed from within the formwork. The reinforcement shall then be inspected for accuracy of fixing. Immediately before placing the concrete, the formwork shall be well wetted and inspection openings shall be closed. The erection, easing, striking and removing of all formwork must be done under the personal supervision of a competent foreman and any damage occurring through faulty formwork or its incorrect removal shall be made good by the Contractor at his own expense.

After removal of formwork, all projections, fins etc., on the concrete surface shall be chipped off, and made good to the requirements of the Engineer. Any voids or honeycombing shall be treated as described in "Faulty concrete"

A. STRIPPING FORMWORK

All formwork shall be removed without undue vibration or shock and without damage to the concrete. No formwork shall be removed without the prior consent of the Engineer and the minimum periods that shall elapse between the placing of the concrete and the striking of the formwork will be as follows: -

Beam sides, wall and columns (unloaded)	-	2 days
Slab soffites (props left under)	-	3 days
Beam soffites (props left under)	-	7 days

Removal of props (partly subject to 7 days concrete cube strength being satisfactory) to: -

Slabs	14 days
Beam soffites	21 days
Cantilevered beams and slabs	28 days

If the contractor wishes to take advantage of the shorter stripping times permitted for beam and slab soffites when props are left in place, he must so design his formwork that sufficient props as agreed with the engineer can remain in their original positions without being moved in any way until expiry of the minimum time for removal of props. Stripping and re-propping will not be permitted.

The above times may be reduced in certain circumstances, at the discretion of the Engineer, provided an approved method is adopted at the Contractor's expense to ensure that the required strength is attained before the forms are stripped.

Solid strips in composite slabs shall be considered as beams. The tops of retaining walls shall be adequately supported with stout raking props at intervals required by the Engineer. These props are not to be removed until 7 days after casting of the floor slab is over.

A. SUPPORTING PROPS TO WALL AND BEAM SOFFITS

Where directed by the Engineer, supporting props to wall and beam soffits are to be left in position until completion of the whole reinforced concrete structure.

The props are to be to the approval of the Engineer and the Contractor must submit the suggestion method of propping to the Engineer prior to removal of formwork to the relevant surfaces.

EXPOSED CONCRETE FINISHES

B. GENERAL

Contractors will be required at an early stage in the Contract, to prepare samples for the approval of the Architect of the various concrete finishes specified hereafter. Samples are to be prepared using the same materials and the same methods of construction, compaction, curing, etc., as the Contractor proposes to use for executing the full quantity of the work.

A record of the mix, water content, method of compaction, any additives used, etc. is to be kept for each sample prepared. When the Architect has approved a sample, it will be kept on site in an approved location.

The finishes in construction will be expected to be up to a standard equal to the approved sample. The Contractor is to include for all costs in preparing samples in his rates for the respective finish.

Consistency in cement colour, grading and quality of aggregates must be maintained in all finished concrete work.

C. TAMPED FINISH

Areas so specified shall be finished at the time of casting with a tamped finish to the Architect's approval, produced by an edge board. Board marks are to be made to a true pattern and will generally be at right angles to the traffic flow. Haphazard or diagonal tamping will not be accepted.

D. CHAMFERS AND REBATES TO EXPOSED CONCRETE

Wherever concrete surfaces are to remain exposed and otherwise where specified or shown on the Drawings, rebates and chamfers are to be provided at junctions, corners and changes in direction of concrete members.

Rebates will also be required to surrounds to chisel-dressed, brushed, or similar concrete finishes. Rebates and chamfers are to have a fair face finish.

Unless otherwise instructed, concrete pours to columns and to other members where applicable are to terminate only at the pre-determined rebate positions.

A. FAIR FACE

Fair face surfaces shall be clean, smooth, even, true to form, line and level, and free from all board marks, joint marks, and honeycombing, pitting, and other blemishes. Forms are to be provided with a smooth lining of plywood, steel, or other approved material which will achieve the required finish without any general rubbing down. Rubbing down will only be permitted to remove any projecting fins at corners or joints.

B. FINE FACE

Fine face surfaces shall be above but to a higher standard obtained from forms provided with an impervious sheet lining of metal or plastics faced plywood in large panels arranged in an approved pattern.

Rubbing down shall only be permitted after inspection by the Engineer. The finished surface shall be capable of receiving paint finish.

C. BRUSHED CONCRETE FINISH

Brushed concrete finish shall be provided to precast concrete members where specified or shown on the drawings.

The surface is to be sprayed with water and brushed within 2 hours of casting to expose the aggregate to an extent to be approved by the Architect.

The brushed face will generally be contained within a surround of fair face concrete and the Contractor is to allow for retaining the fair face forms or otherwise protecting the surround whilst achieving the brushed finish.

D. BOARD-MARKED FINISH

The required finish is to be board-marked pattern and the boards are to be arranged vertically or horizontally to the patterns shown on the Drawings or as otherwise agreed by the Architect.

Formwork shall be made from timber of sufficiently strong grain to the Architect's approval in matching widths with straight sawn staggered joints. Short make-up lengths will not be permitted and boards shall generally be in the longest lengths practical. Construction joint shall be at predetermined positions and at recesses where so detailed.

E. CHISEL-DRESSED FINISH

Chisel-dressed finish is to be carried out on any grade of concrete but not until it is at least 30 days old.

The surfaces are to be fully chisel-dressed to remove a maximum of 12 mm (average 9mm) of the surface by shearing and exposing the aggregate without excessive cracking of the surrounding matrix.

Arises of columns, beams etc. are pre-formed fair face with timber fillets (which have been measured separately) set in the formwork and care must be taken in working up to these to preserve a clean line.

For vertical surfaces of walls and columns particular care must be taken to remove all sharp projections. For beams soffites this requirement is not necessary.

All surfaces requiring this treatment are to have the margins chisel-dressed by hand for a minimum width of 75mm commencing from the fillet edge. Thereafter mechanical chisel-dressing may be used but the Contractor must ensure that a uniform texture and even plane surface is achieved.

The use of sharply pointed steel tools for both hand and mechanical chisel-dressing is essential. Upon completion, the surfaces are to be thoroughly wire brushed and washed down.

PROTECTION OF FINISHES

Wherever possible in-situ exposed concrete finishes should be commenced at the highest level and worked progressively down the building.

Precaution shall be taken to avoid staining or discoloration of previously finished concrete faces by leakage of grout from newly placed concrete. The contractor shall during all stages of construction adequately protect all concrete finishes from damage by leaking grout, knocking, paint stains, falling plaster etc. In cases of balustrade walls to staircases and members where damage is otherwise likely, concrete finishes shall be protected by cladding with timber, Celotex, or other approved sheeting. All sub-contractors shall be informed accordingly on the precautions to be taken.

PRECAST CONCRETE

All precast concrete shall be of mix 1:1.5:3 unless otherwise specified.

The maximum size of coarse aggregate in precast concrete shall not exceed 20mm except for thickness less than 75mm where it shall not exceed 10mm.

The compaction of precast concrete shall conform to requirements given elsewhere in these preambles except for thin slabs where use of immersion type vibrations is not practicable. The concrete in the slabs may be consolidated on a vibrating table or by any other methods approved by the Engineer.

Steam curing of precast concrete will be permitted. The procedure for steam curing shall be subject to the approval of the Engineer.

The precast work shall be made under cover and shall remain under the same for seven days. During this period and for a further seven days, the concrete shall be shielded by sacking or other approved materials kept constantly wet. It shall then be stacked in the open for at least a further seven days to season before being set in position. Where steam curing is used these times may be reduced subject to the approval of the Engineer.

Precast concrete units shall be constructed in individual forms. The method of handling the precast concrete units after casting, during curing and during transport and erection shall be subject to the approval of the Engineer, providing that such approval shall not relieve the Contractor of responsibility for damage to precast concrete units resulting from careless handling.

Repair of damage to the precast concrete units, except for minor abrasions of the edges which will not impair the installation and/or appearance of the units will not be permitted and the damaged units shall be replaced by the Contractor at his own expense.

Except where precast work is described as "fair face" the moulds shall be made of suitably strong sawn timber true in form to the shapes required. Unless otherwise described faces are to be left rough from the sawn moulds.

Where precast work is described as "fair face" the moulds are to be made of metal or are to have metal or plywood linings or are to be other approved moulds which will produce a smooth dense fair face to the finished concrete suitable to receive a painted finish direct and free from all shutter marks, holes, pinnacles etc.

The precast units shall be installed to the lines, gradients and dimensions shown on the Drawings or as directed by the Engineer.

CONCRETE SURFACE BEDS

The concrete shall be placed as soon as possible after being mixed. In transporting the concrete adequate precautions shall be taken to avoid damage to the prepared base. The concrete shall be spread to such a thickness that when compacted it shall have the finished thickness as specified or shown on the drawings. A layer of concrete 50mm less than the finished thickness shall first be spread and struck off at the correct level to receive the top fabric reinforcement. The top layer shall then be added. Not more than 20 minutes shall elapse between spreading the bottom layer and the start of compaction of the top layer. The contractor shall be responsible for maintaining the reinforcement in its correct position during the placing and compaction of the concrete.

The compacting and finishing of the concrete shall be effected by immersion vibrators and a hand mechanical tamper weighing not less than 10 kg per linear meter and having a tamping edge shod with a steel strip 75mm wide fixed to the tamper by countersunk screws. Immersion vibrators with "spade" attachments will be permitted. Compaction shall be continued until a dense scaled surface finish is achieved. Over-compaction causing an excessive amount of fines to be brought to the surface shall be avoided.

The surface of the concrete shall be finished with a wood float finish to the levels, falls and cross falls, as directed or shown on the Drawings and shall be subject to the following tolerances: -

The level shall be within + or - 6mm of the levels directed
The falls shall be within 10% of the falls directed

The smoothness shall be such that departures from a 3 metre straight edge laid in any direction shall not exceed 3mm.

Minor irregularities shall be made good by the use of a steel float but in no circumstances shall mortar be used to make good the surface.

Before the concrete has finally set and after completion of the floating, the concrete shall be brushed with a strong-headed broom to produce a grooved finish in parallel lines to the satisfaction of the Engineer.

As soon as the surface has been finished, it shall be protected against too-rapid drying by means of damp Hessian, polythene sheeting or other approved means placed carefully on the surface and kept damp and in position for 7 days and the concrete shall be kept wet for a further 21 days. The most critical period is the first 24 hours after placing and curing during that time shall be very thorough. The contractor is to obtain the Engineer's approval to the material and method he proposes to use for curing and no concreting will be permitted until sufficient such material is on Site.

Forms shall not be moved from freshly placed concrete until it is at least 24 hours old. Care shall be taken that in their removal no damage is done to the concrete, but should any damage occur the contractor shall be responsible for making it good.

HOLLOW POTS

Hollow clay pots for suspended floor shall be as manufactured by Messrs. Clayworks Ltd., P.O. Box 48202, Nairobi or similar approved.

Hollow concrete pots shall be as manufactured by National Concrete Company, P.O. Box 42974 - 00100 Nairobi or similar approved.

The size of suspended floor units shall be as indicated on the drawings.

Care shall be taken in unloading, stacking and placing hollow pots in positions. Damaged units shall not be incorporated in the works and shall be removed from the Site.

HOLLOW BLOCK SUSPENDED FLOORS

The hollow blocks shall be set out to the dimensions shown on the drawings. Slip tiles will not be required. Care shall be taken when placing and vibrating the concrete to avoid damage to or displacement of the pots. Any blocks damaged shall be replaced before concreting.

A. NOTES CONCERNING PRICING

The contractor must allow for all costs incurred during the progress of the contract for complying with the provisions concerning the preparation and use of graded mixes.

Prices for plain or reinforced concrete shall include for mixing, hoisting, depositing, compacting, curing and protection at the various levels required throughout the building, and shall also include for forming or hacking a satisfactory key for all faces receiving asphalt and plaster work.

Prices for slabs shall include for forming construction joints at bay edges, including all necessary temporary formwork and supplying records of such joints to the Engineer.

Prices for steel rod reinforcement shall include for cutting to lengths and all labour in bending and cranking, forming hooked ends, handling, hoisting and fixing in position and for providing all necessary tying wire, spacer blocks and supports. Prices for fabric reinforcement shall include for all straight cutting and waste, handling, hoisting and fixing in position, providing all necessary tying wire, and supports and all extra material in laps.

The prices for formwork shall include for extra material at joints, extra labour and waste for narrow widths, small quantities, overlaps, passing's, etc. and for fixing at the various levels including battens, struts, and supports and for bolting, wedging, easing striking and removal. Prices for linear items such as boxing shall include for angles and ends.

Prices of all precast concrete shall include for all moulds, finishing as described, handling, reinforcement, hoisting and fixing at the required levels and for casting or cutting to the exact lengths required and any waste resulting from such cutting.

Prices for expansion joints shall include for cutting to size and all temporary supports and prices for expansion joint sealers shall include for all temporary battens or fillets required to form the necessary grooves.

Prices for hollow concrete block suspended construction must be "all inclusive" to include for concrete hollow tiles, in-situ concrete ribs, concrete topping, concrete filling to open ends of hollow concrete tiles and solid concrete bearings and beams.

The Contractor is to allow in his prices for carrying out all tests as specified in this Section apart from work cube tests for which a provisional item is included in the preliminaries section of these Bills of Quantities.

The prices for wrought formwork shall include for fair finish either by rubbing down or by smooth lining all as described in these preambles.

WALLING

A. STONE

Stone for walling shall be hard and dense stone from an approved quarry with accurately dressed faces on all sides.

Stone walling described as load-bearing shall have a minimum crushing strength of 14.00 Newton's per square millimeter and shall comply with B.S 5628: part 2.

B. CONCRETE BLOCKS

All hollow or solid concrete blocks for general use shall comply with B.S 2028, type 'A' and with C. P III: Part 2., of minimum crushing strength of 3.5 Newton's per square millimetre, and must be obtained from an approved manufacturer, equal to sample deposited with and approved by the architect.

Concrete block walling described as load-bearing shall have a minimum crushing strength of 7.0 Newton's per square millimetre.

All concrete blocks must be cured for a minimum period of four weeks before use and all testing of blocks is to be carried out by the Ministry of Works Materials Testing Laboratory or a laboratory approved by the structural Engineer.

C. WALL REINFORCEMENT

All walling described as reinforced shall be reinforced with hoop iron 25mm wide or similar reinforcement centrally in every alternate joint (vertically for the full length of the walls, lapped and crimped 300mm at running joints and full width of wall at angles and intersections).

D. WALL TIES

20-gauge hoop iron ties 25mm wide x 450mm long to be provided for every alternate course at all connections between block walls and reinforced concrete columns or walls. One end to be cast into concrete and other end bent and built into mortar joint of walling.

E. CHASING

Chasing in load - bearing walling of electrical conduits, pipes etc., is to be kept to a minimum size of cut and positions and runs of chases are to be approved by the Architect before any cutting is commenced. Horizontal runs will not be permitted.

F. CEMENT

The cement shall be as described in "Concrete Work"

G. SAND

The sand for mortars shall be as described in "Concrete Work" except that it shall be fine sand.

A. LIME

The lime for plastering shall comply with B.S 890, Class 'A' for non-hydraulic lime and shall be as rich as obtainable and to approval. It must be freshly burnt and shall be slaked at least one month before being used by drenching with water, well broken up and mixed and the

wet mixture shall be passed through a sieve of sixty-four meshes to the square inch. Lime putty shall consist of freshly slaked lime as above described, saturated with water until semi-fluid and passed through a fine sieve; it shall then be allowed to stand until superfluous water has evaporated and it has become of the consistency of thick paste, in no case for a shorter period than one month before being used, during which it must be kept damp and clean and no portion of it allowed to become dry.

Alternatively, hydrated lime with 70% average calcium oxide content may be used and it must be protected from damp until required for use. It shall be soaked to putty at least 24 hours before use.

B. MORTARS

Cement mortar shall consist of one part of Portland cement, to three parts of sand by volume.

The cement/lime mortar shall consist of one part of Portland cement, one part of lime and six parts of sand by volume. The ingredients of mortar shall be measured in proper gauge boxes on a boarded platform, the ingredients being thoroughly mixed dry, and again whilst adding water. In the case of cement/lime mortar the sand and lime shall be mixed first and then the cement added.

All mortar is to be thoroughly mixed to a uniform consistency with only sufficient water to obtain a plastic condition suitable for troweling. No mortar that has commenced to set is to be used or remixed for use.

C. SETTING OUT

The contractor shall provide proper setting out rods and set out on the same all work showing openings, heights, sills and lintels and shall build the various walls and piers to the thicknesses, widths and heights shown upon the drawings. No part of the walling shall be carried up more than one metre higher at one than any other part and in such cases the jointing shall be made in long steps so as to prevent cracks arising and all walls shall be levelled round at floor and wall heads.

D. BONDING WALLING

All blocks shall be properly bonded together and in such a manner that no vertical joint in any one course shall be within 100mm of a similar joint in the course immediately above and below. Alternative courses of walling at all angles and intersections shall be carried through the full thickness of the adjoining walls.

All piers, reveals, quoins and other angles and joints of the walls etc. shall be built strictly true and square.

E. LAYING AND JOINTING

All bricks and blocks are to be well wetted before laying and tops of walls where left off shall be well wetted before commencing building. All joints are to be 10mm thick and flush up and grouted in solid as the work proceeds.

All exposed faces shall be cleaned down on completion with a wire brush or as necessary and mortar droppings, smear marks, etc., removed and rates must include for this.

A. PUTLOG HOLES

All putlog holes shall be carefully, properly and completely filled up with matching material on completion of walling and before plastering is commenced.

B. FAIR FACE

Walling described as fair-faced shall be built with selected blocks and pointed with neat flush joints. Stone walling shall be fine chisel dressed.

C. BRICKS

All bricks shall be obtained from Kenya Clay products Limited, P.O. Box 236--01000, Thika or other equal and approved manufacturer, of sizes as required and shall be hard, sound, square, well-burnt, uniform in shape and free from cracks, stones and other defects.

Samples of bricks shall be deposited with and be approved by the Architect before being used and all subsequent bricks used in the Works shall be to the approved sample.

D. DAMP-PROOF COURSES

Damp-proof courses shall be bituminous felt to B.S 743 weighing 7 lbs. Per square yard, free from tears and holes, and be laid with 150mm minimum laps on and including a levelling screed of cement mortar.

E. PRICES TO INCLUDE

The rates for walling shall include for all reinforcement, all straight cutting, bonding, plumbing angles, forming reveals pinning up to underside of concrete soffits and cutting up to sides of columns and building in ends of lintols and sills.

F. BRICK WORK

Brick shall be built to a gauge of 4 courses to 340mm of wall height including 10mm bed joints.

Facing walls shall be built in stretcher bond and be tied to the blockworks or concrete backing walls with 10mm gauge galvanized wire wall ties 500mm girth, formed to a figure 8 and twisted together at the lap.

Three wall ties per square metre are to be used; wall ties for concrete backing walls shall be cast into the concrete including all temporary fixing to formwork.

Facing walls shall be pointed as the work proceeds. External walls shall have recessed joints and internal walls shall have flush joints. Facing walls shall be kept perfectly clean and no rubbing down of blockwork will be allowed.

G. FAIR FACE

Walling described as fair faces shall be built with selected bricks and pointed.

ROOFING

A. PREPARATION OF SURFACE

All surfaces to receive roofing shall be clean, dry, free from fins or projections and loose materials, and with cracks or voids filled with cement mortar.

B. LIGHTWEIGHT ROOF SCREEDS

Roof screeds will be executed to the approval of the specialist roofing sub-contractor and consist of cement, sand and pumice (1:3:7) finished with 6mm layer of cement and sand (1:4) topping. Screeds shall not be laid in areas exceeding ten square metres during any period of 24 hours. As bays are formed batten strips must be used to retain the exposed edge of the screed. Screeds shall be finished to falls and currents to receive roofing.

C. ASPHALT ROOFING

Asphalt roofing will be executed by an approved specialist Roofing Sub-Contractor. Before any application of roofing, the Contractor is to ensure that all roof surfaces are thoroughly cleaned by sweeping.

Roofing asphalt to B.S 988/1966 Table 3, Column III, Tropical Mastic asphalt laid on two coats to a total thickness of 20mm on and including black sheathing felt and finishes with two coats aluminium paint to horizontal and vertical surfaces.

D. GALVANIZED CORRUGATED STEEL SHEETING

The roof sheeting shall be of the gauge specified and comply with B.S 3083. The roof sheeting shall be laid and fixed with steel hook bolts and nuts, steel roofing bolts and clips or steel roofing screws to B.S 1494: part 1.

E. GALVANISED IT5 LONG THROUGH STEEL SHEETS

Where specified the roof sheeting and fittings shall be 24 gauge IT5 galvanized steel long trough roofing as manufactured by Galsheet Kenya Ltd, P.O Box 78162, Nairobi or other equal and approved manufacturer.

The roof sheeting shall be laid and fixed with approved purpose made hook bolts, washers, etc. to 'z' purlins. Where so specified the roofing shall be prepainted with a Resin cot finish.

F. GALVANISED IT4 LONG THROUGH STEEL SHEETS

Where specified, the roof sheeting and fittings shall be 24 gauge IT4 roofing as manufactured by Galsheet Kenya Ltd, P.O. Box 78162, Nairobi or other equal and approved manufacturer. The roof sheeting shall be laid and fixed with approved purpose made hook bolts, washers etc., to 'z' purlins. The ridge flashing sheets shall be IT4 profiled sheeting curved to the radii shown on the drawings. Where so specified the roofing shall be prepainted with a Resin cot finish.

G. ARMATILE

Armatile shall be size 370x1370mm as imported from South Africa and stocked by Arma roofing Systems (K) Ltd or other equal and approved manufacturer. The fixing shall be in accordance with manufacturers printed instructions on 50x25mm seasoned timber battens.

A. CONCRETE TILE ROOFING

Concrete single lap tiles and fittings shall be to B.S 473 & 550 part 2, Group B of the colour, finish, type, size and manufacturer approved by the Architect. A full range of fittings must be available to match the tiles. Tiles shall be 380 x 230mm nominal unless otherwise specified. Tiles and fittings must be true to shape and of uniform structure. Surface coatings shall be firmly bonded.

Fixing shall include nailing to battens at every third course, at eaves, verges, and at the top course under the ridge. Ridges and hips shall be bedded in cement mortar and roofs shall be left watertight.

B. MANGALORE TILE ROOFING

Mangalore clay tiles shall be 'best' or selected quality as manufactured by the Kenya Clay Products Ltd or other equal and approved manufacturer.

Tiles shall be well wetted before use and all dropped or broken tiles shall be rejected before carrying.

Cutting of tiles, where necessary at hips or valleys, shall be carefully and neatly carried out with properly sharpened tools.

Tiling shall be executed to the Architect's satisfaction and roofs left watertight.

C. PROTECTION

All roof surfaces shall be kept clean and protected and handed over watertight at completion.

CARPENTRY, JOINERY AND IRONMONGERY

D. ALL TIMBER

All timber shall be in accordance with the latest approved Grading Rules issued by the Government of Kenya (Legal Notice No. 358). Timber for Carpentry shall be Second (or select) grade and timber for joinery shall be first (or prime) grade.

E. GENERALLY

All timber as it arrives on the Site shall be inspected by the Contractor, and any timber brought on the site and not complying with the specification or not approved must be removed forthwith from the Site and only timber as approved shall be used in the Works.

The contractor shall upon signing the Contract purchase sufficient supplies of specified hardwoods to avoid possible shortages at a later date.

A. SPECIES OF TIMBER The

following timber shall be used.

<u>Standard common name</u>	<u>Botanical name</u>
Cypress	Cypress
Podocarpus	Podocarpus spp.
Cedar	Juniperus procera
E. A. Camphor wood	Ocotea usambarensis
African Mahogany (Munyama)	Khaya Antotheca
Mninga	Pterocarpus Angolensis
Mvule	Clorophora excelsa
Elgon Olive	Olea welwitschii
Pine	Pinus spp (radiata & patula)

B. TOLERANCE IN THICKNESS

Shall confirm with the following extracts of Government of Kenya Grading rules:

Hardwood Grading: (first and second class)

The following tolerances in thickness will be admitted:

- a) 1.5mm oversize on pieces up to 25mm in thickness, 3mm
oversize on pieces over 25mm and up to 50mm in thickness 6mm
oversize on pieces over 50mm in thickness

Undersize will not be permitted.

Softwood grading: strength grades (for carpentry) First and
second grades

Undersize not allowed

Oversize: all timber to be sawn oversize by 1.5mm for 25mm thickness and width. Not more than 3mm in thickness and not
more than 6mm in width.

Softwood grading: appearance grades (for joinery) First
and second grades

All as for strength grades above

C. INSECT DAMAGE

All timber shall be free of live borer beetle or other insect attack when brought upon the site. The Contractor shall be responsible up
to the end of the maintenance period for executing at his own cost all work necessary to eradicate insect attack of timber which
becomes evident, including the replacement of timber attacked or suspected of being attacked, notwithstanding that the timber
concerned may have already been inspected and passed as fit for use.

D. SEASONING OF TIMBER

All timber shall be seasoned to a moisture content of not more than 22% for Carpentry and 15% for joinery.

A. PRESSURE IMPREGNATION PRESERVATIVE TREATMENT

All carpentry timbers, sawn joinery and timber grounds for fixing joinery shall be treated with pressure impregnated "Celcure" or Tanalith" solution with a minimum net retention of 0.35 Lbs. of dry salt per cubic foot. If so required "charge sheets" issued after treatment with "Celcure" or Tanalith" shall be submitted by the Contractor to the Architect for his retention. All cut ends and any other cut faces of timbers sawn after treatment shall be treated before fixing with "Celcure B" or "Wolmanol" solution brushed on.

The contractor's prices for such timber hereinafter must allow for the above treatment.

B. INSPECTION AND TESTING

The Architect shall be given facilities for inspection of all work in progress whether in workshop or on site. The Contractor is to allow for testing of prototypes of special construction units and the Architect shall be at liberty to select any samples he may require for the purpose of testing, i.e. for moisture content, or identification, species, strength, etc., such tests will be carried out by the forestry Department.

C. CLEARING UP

The Contractor is to clear out and destroy or remove all cut ends, shavings and other wood waste from all parts of the buildings and the site generally, as the work progresses and at the conclusion of the work.

This is to prevent accidental borer infestation and to discourage termites and decay.

D. WORKMANSHIP

All Carpenter's work shall be accurately set out in strict accordance with the drawings and shall be framed together and securely fixed in the best possible manner with properly made joints; all brads, nails and screws, etc., shall be provided as necessary, directed and approved, and the Contractor's prices shall allow for all the foregoing.

All workmanship shall be of the best quality.

All Carpenters' work shall be left with sawn surfaces except where particularly specified to be wrought.

E. DIMENSIONS

Dimensions of timber for Carpentry left with sawn faces shall comply with the previous Clause specifying tolerances in thickness. Dimensions for brought members shall be as described in "Joinery"

F. JOINTING

All timber shall be as long as possible and practicable to eliminate joints. Where joints are unavoidable, surfaces shall be in contact over the whole area of the joint before fastenings are applied.

No nails, screws, or bolts are to be fixed in any split end. If splitting is likely, or is encountered in the course of any work, holes for nails are to be pre-bored at diameter not exceeding 4/5th of the diameter of the nails. Clenched nails must be bent at right angles to the grain.

Lead holes are to be bored for all screws. When the use of bolts is specified the holes are to be bored from both sides of the timber and are to be of the diameter $D + D/16$, where D is the diameter of the bolt. Nuts must be brought uptight but care is to be taken to avoid crushing of the timber under the washers.

JOINERY

A. GENERALLY

All joiners' work shall be accurately set out on boards to full size for the information and guidance of the artisans before commencing the respective works, with all joints, iron work and other works connected therewith fully delineated. Such setting out must be submitted to the Architect and approved before such respective works are commenced.

All joiners' work shall be cut out and framed together as soon after the commencement of the building as is practicable, but not to be wedged up or glued until the building is ready for fixing same. Any portions that warp, wind or develop shakes or other defects within six months after completion of the works shall be removed and new fixed in their place together with all other work which may be affected thereby, all at the Contractor's own expense.

All work shall be properly mortised, tenoned, housed, shouldered, dove-tailed, notched, pinned, braded, etc., as directed and to the satisfaction of the Architect and all properly glued up with the best quality glue. All horns to be cut off neat and square with back of jambs before incorporating into the walls. The feet of all door jambs are to be cut off square with the floor finish and are to be dowelled to the structure with steel dowels.

Joints in joinery must be as specified or detailed, and so designed and secured as to resist or compensate for any stresses to which they may be subjected. All nails, springs, etc., are to be punched and puttied. Loose joints are to be made where provision must be made for shrinkage, glued joints where shrinkage need not be considered and where sealed joints are required. Glue for load-bearing joints or where conditions may be damp must be of the resin type. For non-load-bearing joints to where dry conditions may be guaranteed casein or organic glues may be used.

All exposed surface of joinery work shall be wrought and all arises "eased off" by planning and sandpapering to an approved finish suitable to the specified treatment.

B. DIMENSIONS

All joinery has been described by normal sizes and a 3mm reduction off specified sizes will be allowed for each wrought face except where described as finished sizes in which case joinery shall hold up full dimensions.

C. FIXING JOINERY

All beads, fillets and small members shall be fixed with round or oval brads or nails well punched in and stopped. All large members shall be fixed with screws. Brass screws shall be used for fixing of all hardwoods, the heads let in and pelleted over with wood pellets to match the grain.

D. BEDDING FRAMES. ETC

The Contractor's rates must include for bedding frames, sills, etc., in mortar or dressing surfaces of walls, etc., in lieu.

A. PLUGGING CONCRETE AND WALLS

Round wood plugs shall not be used. All work described as plugged shall be fixed with screws to plugs formed by drilling concrete, wall etc., with a masonry twist drill of suitable size at 750mm spacing and filling the holes completely with "Philplug" rawl plastic or plastic wall plugs as manufactured by Sumaria Industries, P.O. Box 42565, Nairobi, (or equal and approved) in accordance with the manufacturer's instructions.

All holes in masonry to take fixings should be drilled using the appropriate size masonry twist drill and shall not be cut by chisels or punches.

B. FIBREBOARD

Fiberboard shall be 12mm 'Celotex', or other equal and approved termite-proofed soft board, cut to panels with V-edges.

C. PLYWOOD

Plywood for general purposes shall be manufactured to comply with KS 02-301. Marine plywood shall comply with B.S 1088.

D. BLOCKBOARD

Block board shall be laminated board to approval, and exposed edges shall be lipped with 20mm hardwood.

E. MEDIUM DUTY FIBRE BOARD

Shall be imported board to comply with B.S 1142 of the types specified and of approved manufacturer.

F. CHIPBOARD

Chipboard shall be manufactured to comply with B.S 5669.

G. PLASTIC SHEETING

Plastic sheeting shall be "Formica" sheeting 1.5mm thick and securely fixed with approved type waterproof adhesive, and the colours approved by the Architect.

H. SELECTED FOR CLEAR FINISH

All timber and joinery work described as selected for clear finish shall be executed by a specialised joinery firm. The name of the firm shall be submitted to the Architect before any works commence.

I. PROTECT JOINERY

Any fixed joinery which in the opinion of the Architect is liable to become bruised or damaged in any way, shall be completely cased and protected by the contractor until the completion of the Works. The casing shall consist of two layers of polythene sheeting or plywood coverings.

A. FLUSH DOORS

Semi-solid flush doors shall be manufactured to the thicknesses specified and consist of 100mm wide framing all round with minimum 25 thick horizontal core battens at not more than 75mm centres, pressure-impregnated as described and bored with 15mm diameter ventilation holes at 300mm centres. Doors shall have two lock blocks and be faced both sides with 6mm plywood and have 25mm mahogany twice rebated lipping all round and otherwise be equal to the requirements of B.S 459 Part 2A. And equal to an approved sample.

B. BOTTOM EDGES

Bottom edges of doors shall be painted with one coat of approved primer before fixing.

C. IRONMONGERY

All locks and ironmongery shall be fixed with screws, etc., to match. Before the woodwork is painted, handles shall be removed, carefully stored and re-fixed after completion of painting and locks oiled and left in perfect working order. All keys shall be labelled with the door reference marked on labels before handing to the Architect on completion.

D. PRICES TO INCLUDE

Prices of items hereafter shall include for the foregoing labours, etc., and in addition the prices for linear items are to include all internal and external angles, either mitred or tongued, all fair, fitted, stopped, notched or returned ends, all similar incidental labours and all short lengths.

STRUCTURAL STEELWORK SPECIFICATION

E. ALL MATERIALS

All materials shall be of the best quality, free from defects. The materials in all stages of transportation, handling and piling shall be kept clean and damage from breaking, bending and distortion prevented.

F. STRUCTURAL STEELWORK

Materials and workmanship shall conform to the requirements of B.S 49. Steel frames, trusses and purlins shall be carried out by a nominated Sub-contractor.

Shop Work

Three copies of detailed fabrication drawings shall be submitted for approval of the Engineer, prior to commencement of fabrication.

All structural steel fabrication shall conform to the requirements of BS5400 & BS5950.

All structural steelwork shall be fabricated using welded joints where possible for shop joints and bolted joints for field assembly.

After completion of erection, three copies of 'As-Built' drawings shall be submitted to the Engineer for records.

A. NAILS, SCREWS AND BOLTS

Nails, screws and bolts shall be of the best quality mild steel of lengths and weights approved by the Architect. Nails shall be to B.S 1202 and bolts to B.S 916.

Bolts shall project at least two threads through nuts and all bolts passing through timber shall have washers underheads and nuts.

B. WORKMANSHIP

All work shall be carried out in the most workmanlike manner and strictly as directed by the Architect.

Welding shall be neatly cleaned off and units shall be prefabricated in the workshop wherever possible, the minimum of site welding being employed.

All screwed work shall have full internal and external threads and holes shall have been cleaned off. Countersinking must be concentric.

The quality of materials and workmanship shall conform to the following requirements of the following British Standards.

B.S 15	Mild steel for general structural purposes.BS
449	The use of structural steel in building
BS 994	Cold rolled steel sections

C. QUALITY OF MATERIAL & WORKMANSHIP

The quality of all materials and workmanship used in the execution of this contract shall comply with the requirements of the most recent issues of the following British Standards and Codes of practice, including all amendments to date of calling for Tenders.

BS. 4(Pt. 1) Hot Rolled Sections

BS. 4 (Pt. 2) Hot Rolled Hollow Sections

BS. S950 The use of Structural Steel in Building

BS. 638 Arc welding plant, equipment and accessories

BS. 639 covered Electrodes for the manual Arc Welding of Mild Steel and medium tensile steel BS. 916

Black bolts, screws and nuts

BS. 1449 Steel Plate, sheet and strip

BS 1775 Steel tubes for Mechanical, Structural and General Engineering purposes.BS. 2994

Cold Rolled Steel Sections

BS. 4190 ISO metric black hexagonal bolts, screws and nutsBS.

4320 Metal washers for general engineering purposes BS. 4360

Weldable structural steel

BS 4848 Hot rolled structural steel sections

BS 4872 approval testing of welders when welding procedure approval is not required BS 5135

general requirement for the Metal Arc Welding of structural steel

BS 5483 protection of iron and steel structures from corrosion.

The Engineer may at any time require any materials to be tested in accordance with the requirements of the Standards listed above. The cost of all successful tests shall be borne by the client, but the Sub-contractor shall if required promptly supply at his own expense test pieces as required by the Engineer. The costs of tests on materials failing to comply with this Standard shall be borne by the sub-contractor. If in the opinion of the Engineer, faulty materials and/or workmanship have been used in the works, the sub-contractor may be directed to dismantle and cut out the parts concerned and remove them for examination and testing. The cost of dismantling, cutting out and making good to the approval of the Engineer shall be borne by the sub-contractor.

A. FABRICATION

(i) Cutting and bending

All members, plates, brackets, etc. shall be neatly and accurately sheared, sawn or profiled to the required shape as shown on the drawings. Where steel is oxy-cut to shape, care shall be taken to preserve the full finished sizes required. If members or plates are bent or set, the bends or sets shall be correctly made to the radii or angles specified without leaving hammer marks. The material may be heated to permit this. Material that has been heated shall be annealed to approval.

(ii) Punching and drilling

Holes for black bolts shall be drilled or punched 2mm larger in diameter than the bolt used. Hole for high tensile friction grip bolts shall be drilled or sub-punched and reamed to 2mm larger in diameter than the specified bolts size. All drilled holes shall be parallel sided and shall be drilled with the axis of the holes' perpendicular to the surface. Badly drilled holes shall either be reamed out to approval and larger bolts fitted or otherwise as directed. All rough arises shall be ground off. Holes for bolts in material thicker than 15mm must be drilled. When holes are drilled in one operation through 'o or more thickness of material, the parts shall be separated after drilling and all burcs removed before assembly. Holes for bolts shall not be formed by a gas cutting process.

All members shall be fabricated with a tolerance in length of +0mm and -3mm, all shall not deviate from straightness by more than 1 in 400.

The allowance for angular twist shall be $(3 + 0.6L)$ mm where L is the length of the member under consideration in metres. Twist shall be measured by placing the member as fabricated against a flat surface measuring the difference between the two corners of the opposite end.

The above tolerance shall be adhered to unless otherwise specified on the Engineer's drawings.

B. FASTENING

(i) Bolting and Screws

All bolts used shall be of such length that at least full thread is exposed beyond the nut after the nut has been tightened. Where a nut or bolt head would bear on an inclined surface, a bevelled washer of the correct shape shall be interposed between the two surfaces. Bevelled washers shall not be allowed to get out of position during fabrication and erection and for this purpose may be spot welded to the steel surface. Bevelled washer for use with high tensile bolts may not be welded.

(ii) Self-Drilling Screws

All self-drilling screws used shall be of such length that at least one full thread is exposed beyond the purlin. The self-drilling screws should be correctly driven (not under or over driven) such that the rubber seal should be in line with the underside with the hexagonal head. All self-drilling screws must have a corrosion resistance tested to a requirement of at least 1000 hours as per AS 3566 Clause 3 or equivalent British Standard.

(iii) High tensile bolts, nuts and washers, friction grip bolts.

All high tensile steel bolts, nuts and washers used in joints shall comply with the requirements of BS 3139 and shall be used in accordance with BS 3294.

(iv) Pressed Steel Purlins

Pressed or cold rolled steel purlins and girths shall be to the sizes indicated on the drawings and shall be formed from approved steel strip with a minimum yield strength of 185N/sq.mm.

The sections shall be manufactured straight and free from twist, the tolerance away from straightness shall not be greater than 2mm for every 1500mm in length along any folded edge.

A. ELECTRIC WELDING

All welding shall be carried out in strict accordance with the requirements of BS 1856 and 938 and electrodes shall comply with BS. 639.

Fusion faces shall be free from irregularities such as tears, Fins etc. which would interfere with the disposition of weld metal.

Fusion faces shall be smooth and uniform and shall be free from loose scale, slag, rust, grease, paint and/or other deleterious material.

All welds shall be of acceptable types, shall be of the finished sizes specified, and shall be carried out in such sequence that minimum distortion of the parts welded results.

Preparation of edges for welding shall be carried out by planning or machine flame cutting. Manual flame cutting may be permitted in certain circumstances.

Parts to be welded shall be maintained in their correct relative positions during welding, preferably by jigs.

Multiple run welds shall be carried out with each run closely following the previous run but allowing sufficient time for the proper removal of slag.

The sub-contractor shall ensure that each run is inspected and unsatisfactory weld cut out and remade to approval.

Welds in material 25mm or greater in thickness shall be made by the Argon Arch or similar approved process, and special precautions shall be taken to prevent weld cracking.

Unless otherwise shown, the minimum size of fillet shall be 6mm.

On completion, welds shall present a smooth and regular finish. Weld metal should be solid throughout with complete fusion between weld metal and parent metal and between successive runs throughout the joint.

Defects shall be cut out and made good to approval in sound weld metal.

The external faces of butt welds are to be ground smooth on completion and to be to the approval of the Engineer.

A. SHOPS AND FIELD CONNECTIONS

(i) Rolled Sections

All shop connections shall be electric welded or bolted with high tensile friction grip bolts.

No bolts used shall be less than 12mm diameter and no weld less than 40mm in length. At least two bolts shall be used in connections transmitting loads unless otherwise indicated by the Engineer.

No weld of length less than four times the nominal fillet size shall be deemed capable of carrying a load.

Beam to column connections not detailed shall be on "Standard" top and bottom cleat connections with the load carried on the bottom cleat. "Standard" web connections shall be used for connecting beams to beams.

Field connections shall be as detailed i.e. bolted with tensile or black bolts in drilled holes. Black bolts in punched holes will only be permitted for connections carrying a designed load or for connections to timber members.

(ii) Structural Hollow Sections

Circular and Rectangular Hollow sections shall be connected by electric welding unless shown otherwise. The design of welds shall be in accordance with Clause 54 and Appendix C of BS. 449.

(iii) Trusses and Portal frames

Trusses shall be carefully set out to the dimensions shown on the drawings.

Where it is required that trusses be cambered, such camber shall be provided by bending the bottom chord to the arch of a circle.

Notwithstanding any dimensioned spacing of purlin cleats, the sub-contractor shall ensure that purlin cleat spacing is satisfactory for the available stock lengths of roof sheeting. However, the Engineer's approval must first be obtained before any alteration is made in purlin spacing or sheeting sizes.

Splices in portal and other frames shall be made where shown on the details.

(iv) Boxed Members

Abutting edges of boxed members shall be connected and sealed with a continuous weld to exclude the entrance of moisture. Where specified such welds shall be ground flush to approval.

(v) Shop Assembly

Such assembly of units in the shop as is specified or necessary before transporting to the site will be inspected by the Engineer before painting.

The work will be laid out in the shop so that all parts are accessible for inspection and testing of the work.

The Sub-contractor shall furnish all facilities for inspection and testing of the work and he must notify the Engineer on each occasion when the material is ready for inspection.

(vi) Marking

All members of the structure to be site assembled shall be match marked in accordance with the shop details and marking plans submitted for approval.

A. ERECTION

(i) Site Dimensions

No erection shall commence before accurate site dimension have been taken by the Sub-contractor, and no claim will be considered should final dimensions differ from those on the drawings. Any modifications to the structural steel required in order to comply with site dimensions shall be made on the ground to the Engineer's approval before erection is commenced.

(ii) General Setting Out-Tolerances

The temporary bench Mark (TBM) which shall be located at the structural ground floor level (S.G.F.L) having been agreed on site between Architect, Engineer and Main Contractor, shall be considered as the site datum.

The datum points for the setting out of the datum lines passing through the T.B.M at all floors and roof levels: ± 0 M. The Permissible

Deviation (P.D) from the T.B.M and D.L shall be as follows: -

Setting out on plan at S.G.F.L

All setting out dimensions with respect to each datum line (i.e. P.D. from 'x' and 'y' plane axes 0 ± 0 m per 30 metres. Transfer of T.B.M to structural first floor, intermediate floors and roof levels. With respect to the T.B.M. at S.G.F.L. the

T.B.M at:

First floor level ± 5 mm Intermediate Floor levels ± 10 , roof level ± 15 mm.

Setting out on plan of upper floors with respect to the transferred T.B.M.

All setting out of dimensions with respect of each datum line ± 10 mm per 30 metres.

The clear distance between adjacent elements at any level where accuracy is required for doors, windows, services, secondary steel work etc. ± 5 mm.

The P.D with respect to the relevant T.B.M of the upper or lower surface of any truss or element, taking into account specified chambers

± 10 mm) the plumb vertical members ± 10 mm per storey.

(iii) Generally

All erection shall be carried out by competent and experienced men and the sub-contractor shall take every care to safeguard the public, workmen and adjoining property.

All gear used shall be of adequate strength and shall comply with all regulations current at the time.

The Sub-contractor shall be held responsible for all damage caused to the structure, workmen or buildings during erection.

(iv) Storing and handling

Steel shall be stored and handled and erected in such a manner that no member is subjected to excessive stresses which could have an adverse effect on the properties of the steel. If in the opinion of the Engineer, the properties of the steelwork has been adversely affected, the Sub-Contractor shall remove this steel from the site and replace it at his own expense.

(v) Erection Details

No member or part of a member which has been bent or distorted shall be erected in that condition. All straightening shall be done on the ground.

Columns shall be wedged to line and level on steel or cast iron wedges and checked by the Engineer. After acceptance, column bases shall be grouted to approval before wedges are removed. Unless shown on the drawing, all columns shall be left truly vertical and correct to line and level. Beams, girths etc. shall be erected level unless otherwise shown and correctly positioned.

Trusses and open web joints shall be carefully handled at all times and when being erected shall be lifted at such points and in such a manner as will preclude any possibility of damage from erection stresses.

Immediately after erection, each truss shall be made secure by purlins, bracing or guys to approval. Bracing shall be placed in position as soon as dependant work will permit.

(vi) Field Connections

In making connections, drifting of unfair holes will not be permitted and holes not matching properly shall either be reamed or drilled out and a larger bolt inserted or otherwise as directed.

Holes formed or enlarged by oxy-cutting will be condemned and must be filed to approval by electric welding and red drilled.

(vii) Tightening and Testing High Tensile Grip Bolts

Before assembly, the contact surface, including those adjacent to the washers, shall be descaled or carry normal tight mill scale. They shall be free from dirt, oil, loose scale, burrs, paint (except priming paint) pits and other defects that would prevent solid seating of the parts.

Bolts shall be assembled with approved hardened flat or tapered washers as required between the bolt head and nuts and the softer mild steel.

When bearing faces of the bolted parts have a slope of more than 1 in 20 with respect to plane normal to the bolt axis, square smooth bevelled washers shall be used to compensate for the lack of parallelism.

All bolts shall be tightened by the "turn of Nut" method. This method shall generally be as approved by the Engineer to achieve in all bolts a minimum of tension equal to the roof load.

(viii) Grouting

Unless otherwise detailed on the drawings, a space of not less than twenty (20mm) and not more than Forty (40mm) shall be provided between undersides of columns base plates and footings, and between all beam and roof truss bearings and concrete pads etc.

After each column, beam, or roof truss has been wedged up to a line and level and fixed in position to approval, the space between footing or pad and the underside of the base plate or steel member shall be grouted with a mixture of Portland cement and approved washed sand.

The Portland cement and sand shall be thoroughly mixed to approval in equal proportion by volume with only sufficient water to produce a mixture of "damp earth" consistency and shall be used within twenty minutes of mixing. The Caulking mixture shall be packed to approval into the space between base plate and foundation and protected from damage until set.

A. PAINTING

(i) Paints

All paints are to be supplied by a supplier approved in writing by the Engineer.

Paints are to be delivered to the site or the Sub-contractor's yard in the original containers as supplied by the manufacturers with seals unbroken and are to be used in strict accordance with the manufacturers' instructions. Manufacturer's representatives are to be free to visit the site and inspect materials and workmanship, and if necessary take samples of materials for laboratory analysis.

Paints are not to be thinned unless instructed by the Engineer.

No external painting is to be carried out during rain or when rain is likely to occur before the paint has had time to dry. All surfaces are to be dry and free from moisture at the time of painting.

All structural steel shall be thoroughly scrapped and wire brushed to remove mill scale and rust. Dirt and grease or oil shall be washed off with white spirit and the steel allowed to dry.

(ii) Painting

A first coat of Red Oxide Zinc Chromate Primer shall be applied in the works immediately the steel preparation has been completed. A minimum of 24 hours shall elapse before the steel is moved from its position after painting has been carried out. After delivery to site, the steel shall be carefully examined and all areas where the priming coat has been damaged and/or where rust had developed shall be washed with white spirit and wire brushed as necessary and a further priming coat as for the first applied to completely cover the damaged areas.

During erection, surface of steel which are to be in contact, shall be painted with one further coat of primer as previously described and the surface brought together whilst the paint is still wet.

Bolts, Nuts, Washers, etc. shall after erection is completed to approval, be carefully degreased with white spirit and painted as for steelwork.

Steel purlins and sheeting rails shall generally be painted as for steelwork except for purlins and rails supporting aluminium sheeting when the following specification shall be used. 1st coat - Red Oxide zinc chromate primer, 2nd coat - an approved aluminium paint. The interiors of mild steel gutters shall be prepared as previously described for Structural Steelwork.

A. PRICES, MEASUREMENTS AND PAYMENT

Prices quoted by the Contractor shall be based on the calculated weights of steel and shall include for manufacture, painting and supply all as specified and as shown on the drawings, including the cost of delivery to the site or other agreed place or places and the supply of all bolts, rivets, plugs, gussets, cheeks, stiffeners etc. to complete the erection of the works. (Note where member overall size is specified and thickness or weight per unit length is not specified or clear, take the minimum size specified in relevant British Standard for sections (refer quality materials and workmanship) but shall not have less than 3mm wall, flange or web thickness.

Prices shall include for erection (all labour, scaffolding, and other erection equipment necessary) and cover the cost of additional prime coat painting as previously specified. The prices shall also include for lining up, levelling and plumbing, but not for grouting up of the bases.

The basis for payment of steelwork shall be the calculated steel weights of the structure. Any variation from the original design on which the quotation was made, which results in either an increase or decrease in calculated weight of the structure as completed, shall result in the appropriate additions or deductions to the agreed quotation.

Any written instructions from the engineer which may result in additional work over and above that for which the Contractor quoted will be considered as extras and shall be paid for on the basis of calculated additional steel weights.

B. ROOF SHEETING

Roof sheeting and wall cladding shall comply with BS CP 143 and shall be capable of spanning 1.425m under a load of its own weight and an applied load of 0.2 SKN/M². Defective sheet shall not be used.

Translucent sheet shall be from a standard manufacturer approved by the Engineer. These sheets shall have a profile to match the rest of pre-painted steel sheets on the roof. Skilled men shall be employed for fixing the sheets. Proper fixing of the edges of translucent sheets with the edges of steel sheet should ensure that no leakage occurs during rains. Defective sheet shall not be used and if formed after Laying, such sheets should be replaced by good sheets.

C. COMPOSITE IT4/IT5 SHEETS WITH INSULATION

Shall be formed with 2 Nos. IT4//IT5 sheets kept 50mm apart by 20 gauge (or as specified on the drawings) Galvanised iron (girth = 150mm) spacer cold formed into channel. The spacers are at the same centres as the purlins i.e. 1.425 centres unless stated otherwise by the Engineer. The insulation shall be mineral fibre 50mm thick packed and sealed in 1000g polythene bags of a size convenient to handle and laid over the lower sheet. The connection between the sheet, mild steel purlin and Galvanised iron spacer shall be with J bolts or self-drilling roof screws.

D. RAINWATER GOODS

(i) Quality

Rainwater good shall be in accordance with BS 1091. It shall be as per the details shown in the drawings and as per the direction of the Engineer. Rainwater gutter and pipes shall be made out of steel sheets of the required thickness.

(ii) Fixing

Sheeting and rain water goods shall be fixed in accordance with BS 1494. IT4 sheets, ridges, flashing sheets shall be fixed by skilled men as per standard procedure with sufficient number of bolts, washers and laid out properly on the roof so that there shall be no leakage during rains. Rainwater gutter, pipe etc. shall be fixed properly with necessary accessories to avoid any leakage of rainwater.

PLASTER WORK AND OTHER FINISHINGS

A. CEMENT

The cement shall be as previously described in "Concrete Work"

B. SAND

The sand shall be as described for fine aggregate but that for plastering shall be light in colour and well graded to a suitable fineness in accordance with the nature of the work in order to obtain the finish directed.

C. LIME

The lime for plastering shall comply with B.S 890 Class "A" for non-hydraulic lime and shall be as rich as obtainable and to approval. It must be freshly burnt and shall be slaked at least one month before being used by drenching with water, well broken up and mixed and the wet mixture shall be passed through a sieve of sixty-four meshes to the square inch. Lime putty shall consist of four freshly slaked lime as above described, saturated with water until semi-fluid and passes through a fine sieve; it shall then be allowed to stand until superfluous water has evaporated and it has become of the constituency of a thick paste, in no case for a shorter period than one month before being used, during which it must be kept damp and clean and no portion of it allowed to become dry.

Alternatively, hydrated lime with 70% average calcium oxide content may be used and it must be protected from damp until required for use. It shall be soaked to putty at least 24 hours before use.

D. LIME PLASTER

Lime plaster shall consist of a backing coat in cement, lime and sand (1:2:9) and a finishing coat of lime putty skim with 10% cement added.

E. POLISHED GRANOLITHIC

Polished granolithic shall consist of one part cement (by volume) coloured light brown with an approved dye, to two parts (by volume) of metamorphic coral chippings graded from 6mm down to 3mm with not more than 15% to pass a No. 40 B.S sieve.

F. POLISHED TERRAZZO

All terrazzo work shall be carried out by an approved sub-contractor. Polished terrazzo shall consist of a first coat of white cement and sand (1:3) and a 12mm finishing coat of "Snowcrete" and marble chippings (1:2) coloured with "Cemmentone No. 1" colouring compound mix in the proportions of 1:10. Compound to cement. The overall thickness will be as specified in the measured work.

Where terrazzo paving is specified as incorporating especially selected large aggregate the thickness of the finishing coat shall be increased as required.

The price shall include for all grinding waxing and polishing to the Architect's satisfaction.

A. VINYL TILES

The vinyl floor tiles shall be 300 x 2mm thick and shall comply with B.S 3260. They shall be of selected pattern and colour from the 'Marley heavy duty tile range' or equal and approved.

Vinyl floor tiles shall be stored and laid in accordance with the manufacturers written recommendations using a bitumen- based adhesive. The tiles shall be laid with butt joints straight both ways. Tilling shall start from the centre of a room or area.

B. GLAZED WALL TILES

White glazed wall tiles shall be size 150 x 150 x 6mm thick, or as specified and shall be fixed with cementmortar and grouting joints with approved epoxy resin-based grout all manufactured to comply with B.S 1281.

C. QUARRY TILES

Quarry tiles shall be manufactured to B.S 1286 type A and shall be chosen from the manufacture's standard colour range. Quarry tiles to be applied with one coat Tran seal liquid before being laid. Prices shall include for waxing toArchitect's satisfaction.

Quarry tiles shall be bedded in 10mm thick cement mortar (1:3) with 10mm joint laid straight both ways. The jointsshall be filled with cement mortar neatly flush pointed. The tiles are to be soaked in water before Laying.

D. PRECAST TERRAZZO TILES

Precast terrazzo tiles are to be as manufactured by the Linotic Flooring Company. P.O. Box 42290, Nairobi or equal and approved.

E. EUROCON TILES

Eurocon tiles shall be as manufactured by Kenya Builders Ltd or other equal and approved manufacturer.

F. MARBLE GLOMERATE TILES

Marble glomerate tiles shall be a manufactured by the Linotic Flooring Company Ltd or other equal and approved manufacturer. All edges shall be square and faces polished.

G. BEDS AND BACKINGS

Beds and backings shall be composed of cement and sand in the volumetric proportions sated in the measured work.

WORKMANSHIP

A. GENERALLY

All screeds and pavings shall be finished smooth, even and truly level unless otherwise specified and paving shall be steel trowelled.

Rendering and plastering shall be finished plumb, square, smooth, hard and even, and junctions between surfaces shall be perfectly true, straight and square.

B. PLASTER WORK AND OTHER FINISHINGS

At the junction of all concrete work and block walling a 150mm wide strip of expanded metal lathing must be included to avoid plaster cracks.

All arises and angles shall be clean and sharp or slightly round or thumb coved as directed including neatly forming mitres.

All surfaces to be paved or plaster must be brushed clean and well wetted before each coat is applied. All cement pavings and plaster shall be kept continually damp in the interval between application of coats and for seven days after the application of the final coat.

Where dubbing out is required, it shall be composed of one part cement to six parts of sand.

Partially or wholly set materials will not be allowed to be used or remixed. The plaster etc., mixes must be used within two hours of being combined with water.

C. SAMPLES

The Contractor shall prepare samples minimum one square meter of each of the screeds, pavings and plastering for the approval of the architect, after which all work executed shall conform to the approved samples.

D. LIME PLASTERING

Lime plastering shall be carried out in two coats having a total thickness of not less than 15mm to walls and 10mm to ceilings.

The first coat shall be trowelled to a perfectly true and even surface and finished with a wood float, the surface being sprinkled with water from a brush during the process and before it has set thoroughly scratched to form a key. The finishing coat shall not be less than 1.5mm thick, thoroughly worked with a steel trowel, sprinkled with water as before and be brought to uniform smooth and hard surface.

E. TYROLEAN RENDERING

Tyrolean rendering shall consist of a trowelled backing coat in cement and sand mortar (1:4) gauged with 10% lime, to a thickness of 10mm and a finished coat of cement sand mortar (1:4) applied with an approved machine to a thickness of between 5 and 10mm, to provide an even and uniform texture. Coloured cement or pigment is to be used if so directed by the Architect.

A. GRANOLITHIC AND TERRAZZO PAVING

Granolithic and terrazzo paving shall be spread and well compacted and given only sufficient trowelling to produce a perfectly level surface immediately after laying. When the granolithic or terrazzo has stiffened sufficiently so that a hard surface can be obtained without laitance, then the surface shall be machine ground to a perfectly even and smooth surface. On no account will dusting with neat cement to the surface be permitted.

B. MARBLE TILES AND TERRAZZO TILES

The tiles are to be bedded in 10mm thick cement mortar (1:3) with fine but joints. The surface is to be washed and polished on completion.

C. CERAMIC WALL TILES

Wall tiles shall be fixed with a cement-based adhesive with 3mm wide joints straight both ways. When an area of tiles is complete the joints should be grouted with white cement.

D. BEDS AND BACKING

Floor screeds shall not be laid in areas exceeding ten square metres during any period of 24 hours. As bays are formed steel edge strips must be used to retain the exposed edges of the screed.

The thicknesses and mixes of the screeds shall be adjusted to suit the various top dressing and the Contractor must first ascertain what finish is intended to each specified area before the work of laying screeds is out in hand.

Screeds shall be finished with a wood float for wood blocks and steel trowel for thermoplastic and similar tiles.

E. MAKING GOOD

All making good shall be cut out to a rectangular shape, the edges undercut to form a dovetail key and finished flush with the face of surrounding paving or plaster. Cut out and make good all cracks, blisters, and other defects and leave the whole of the work perfect on completion.

F. PRICES GENERALLY

In addition to the foregoing, prices of superficial items are to include for work in narrow widths, all liner labours, angles and arises, all fair edges, for making good up to or stopping to a line at the required level at top of skirting or dados where directed and for making good up to windows, door frames and similar.

The prices for all linear items unless otherwise measured are to include for all short lengths, angles and arises, mitres, and ends of every description.

Prices for pavings are to conclude for adequate covering and protection during the progress of the works to ensure that the floors are handed over in perfect condition on completion.

Prices for all pavings and plastering, etc., shall include for hacking concrete surfaces and for raking out joints of walls 12mm deep and for cross-scoring undercoats to form a proper key.

Plastering in walls generally shall be taken to include flush faces of lintels, beams etc., in same.

A. PROTECTION

The contractor's rates for all finishing's shall allow for adequate protection against damage by all following trades or any others causes, to the satisfaction of the Architect.

GLAZING

B. GLASS

All glass shall be manufactured complying with BS 952, free from flaws, bubbles, specks and other imperfections.

Glass panes shall be cut to sizes to fit the openings with not more than 1.5mm play all round and where puttied shall be sprigged to wood or clipped to metal frames.

Clear sheet glass shall be ordinary glazing (O.Q) quality. Polished plate glass shall be (G.G) quality. Anti-bandit glass shall be 9mm thick laminated glass of approved type.

C. PUTTY

Putty for glazing in wood frames shall be composed of pure linseed oil and powdered whiting free from grittiness in accordance with B.S 544 Type 1 putty.

Putty for glazing in metal frames shall be composed of hard-setting tropical putty specially manufactured for use with steel windows.

Rebates for metal frames receiving glass shall be prepared and treated with primer for putty prior to glazing and putty shall be primed ten days after glazing.

D. BEDDING STRIPS

Bedding strips shall be of plastic or wash-leather approved by the Architect and shall be cut to fit exactly the line offrame and beads.

E. ON COMPLETION

Remove all broken, scratched or cracked panes and replace with new to the satisfaction of the Architect. Clean inside and out with an approved cleaner. On no account shall windows be cleaned by scrapping with glass.

PLUMBING

A. EXECUTION OF THE WORKS

The works shall be carried out strictly in accordance with: -by-
laws of the Local Authority

British standard code of practice C.P. 301: 1971, Building drainage British
standard code of practice C.P. 310:1965, water supply

British standard code of practice C.P. 304: 1968, sanitary pipework
British standard code of practice C.P 305: 1974, sanitary appliances

British standard code of practice C.P. 342: 1970 centralized hot water supply.

All other relevant British standard specifications and codes of practice (hereinafter referred to as B.S and C.P.respectively)

The working drawings The
architect instructions

B. EXTENT OF THE WORKS

The works include, unless otherwise specified, the supply, installation, testing and commissioning, and delivery in working order of the installation shown on the drawings and specified in the specifications, including all details suchas: -

Cold and hot water pipes, discharge pipes (the discharge pipe is used as a comprehensive all-embracing description in place of the traditional soil and waste terms), drain and ventilating pipes, valves, firefighting installations and equipment, thermal insulation, etc., and all labour, material, tools, instruments and scaffolding necessary to execute the work in a first-class manner.

The contractor shall undertake all modifications demanded by the authorities in order to comply with the current regulations and produce all certificates, if any, from the authorities without extra charge.

C. EXTENT OF THE CONTRACTORS DUTIES

At the commencement of the work, the contractor shall investigate and report to the Architect the availability of all materials and equipment to be used in the work. If not available, the contractor shall at this stage place orders for the materials in question and copy the orders to the Architect. Failure to do so shall in no way relieve the contractor from supplying the specified materials and equipment in time.

The contractor shall be responsible for verifying all dimensions relative to his work by actual measurement taken on the site.

D. RECORD DRAWINGS

During the execution of the works on the site the contractor shall, in a manner approved by Architect, record on working drawings and contract drawings all information necessary for preparing record drawings of the installed contract works. Marked-up drawings and other documents shall be made available to the Architect as he may require for inspection and checking.

Record drawings may, subject to the approval of the architect, include approved working drawings adjusted as a correct record of the installation of the contract works.

Record drawings shall be prepared on approved translucent linen or plastic material suitable for reproduction by the dye line process or similar.

A. MATERIALS AND WORKMANSHIP GENERALLY

All materials, equipment and accessories are to be new and in accordance with the requirements of the current rules and regulations where such exist, or in their absence with the relevant B.S.

Uniformity of type and manufacturer of equipment or accessories is to be preserved as far as practicable before placing an order.

Where a particular item is specified as a particular firm's product "or similar" it is to be clearly understood that this is to indicate the type and quality of the equipment required. No attempt is being made to give preference to the equipment supplied by the firm whose name or products are quoted.

Where particular manufacturers are specified herein, no alternative make will be considered, and the Architect shall be allowed to reject any other makes.

The contractor will be entirely responsible for all materials, apparatus, equipment, etc., furnished by him in connection with his work, and shall take all special care to protect all parts of finished work from damage until handed over to the employer.

The work shall be carried out by competent workmen under skilled supervision. The Architect shall have the authority to have any of the work taken down or changed, which is executed in an unsatisfactory manner.

B. TUBING GENERALLY

All tubing exposed on faces of walls shall, unless otherwise specified be fixed at least 25mm clear of adjacent surfaces with approved holder bats built into walls, cut and pinned to walls in cement mortar; where fixed to woodwork, suitable clips shall be used.

All tubing specified as fixed to ceilings, roofs or roof structures shall be fixed with approved mild steel hangers cut and pinned to ceilings, roof or roof structures. Where three or more tubes are fixed to ceilings, roofs or roof structures close to each other, they shall be fixed in positions which leave the lower surfaces at the same horizontal level, unless otherwise specified.

Where insulated tubing shall be fixed with the insulation at least 25mm clear of adjacent surfaces and with at least at the same clearance between insulated pipes.

Tube fixings and supports shall, if nothing else is specified, be arranged at intervals not greater than those given in the following tables: -

Mild steel tubing

Diameter of pipe in mm	maximum spacing of Fixing in mm	
	runs	Horizontal Vertical runs
15	1,800	2,400
20	2,400	3,000
25	2,400	3,000
32	2,700	3,000
40	3,000	3,600
50	3,000	3,600
65	3,600	4,600
80	3,600	4,600
100	4,000	4,600

Each support shall take its due proportion of the weight of the tube or pipe and shall allow free movement for expansion and contraction.

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

All tubing specified as chased into walls shall have the wall face neatly cut and chased, the tubing wedged and fixed and plastered over.

Where tubing is laid in trenches care shall be taken to ensure that fittings are not strained.

All water systems shall be provided with sufficient drain points 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 a position as to be difficult to reach from a short step-ladder, extension spindles with floor or wall pedestals shall be provided.

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.

All formed bends shall be made so as to retain the full diameter of the pipe.

Sleeves shall be provided where tubes pass through walls and solid floors to allow movement of the tubes without damage to the structure. The overall length of the sleeves shall be such that it projects at least 2mm beyond the finished thickness of the wall or partition.

Tubing shall be cut by hacksaw or other method which does not reduce the diameter of the tube or form a bead or feather which might restrict the flow.

A. GALVANISED MILD STEEL TUBING

Galvanised mild steel tubing shall be in accordance with B.S 1387: 1967 with screwed and socketed joints; medium -duty for pipes above ground, heavy-duty for pipes underground, cast into concrete or chased into walls.

Fittings for same shall be galvanised malleable iron to B.S 1940: 1965, with threads to B.S 21: 1957.

Joints shall be made with fine hemp and an approved jointing compound or tape. Compound containing red lead must not be used.

Long screw connectors and flat-faced unions shall not be used, unless otherwise specified.

Where laid underground or cast in concrete, galvanised mild steel tubing shall be protected by "Densotape" or similar, would on at least two layers thick, or given two coats of approved bitumen. Minimum earth cover to underground tubing shall be 450mm.

Where chased into walls or cast into concrete, galvanised mild steel tubing carrying hot water shall be wrapped in hair felt secured by copper wire.

The fixing of galvanised mild steel tubing shall use: -

- a) Malleable iron "school board" pattern brackets for building in or for screwing to structure, or b) Malleable iron pipe rings, with either back plate, plugs or girder Clips;
- or c) Purpose-made straps to the Architect's approval.

A. UNPLASTICISED P.V.C. PIPES

Unplasticised P.V.C; discharge and ventilating pipes and fittings shall be to B.S 4514: 1964, Grade 2.

U.P.V.C ventilating pipes passing through roofs shall terminate at least 300mm above the roof level and shall be protected against insect penetration by a copper wire mosquito-proof balloon grating securely bound on the top of the pipe with stout copper wire.

Joints for U.P.V.C. discharge and ventilating pipes shall be spigot and socket joint which incorporate synthetic rubber rings or they shall be closely fitting spigots and sockets jointed together by means of solvent solution provided by the pipe maker.

Joints of U.P.V.C discharge and ventilation pipes to cast iron drain pipes shall be by means of purpose-made cast iron sleeves jointed with tarred yarn and fibrous lead yarn properly caulked into the wetted sockets. Joints to pitch fibre drain pipes shall be made with approved adapters.

The fixing of U.P.V.C pipes shall use holder bats of metal or plastic-coated metal; care being taken that they do not damage the pipe when tightened. Where anchor points are specified to control thermal movement, the holder bars shall be fitted on the pipe sockets. Intermediate holder bats fitted to the pipe barrel shall be such as to allow thermal movement to take place.

At the foot of all U.P.V.C ventilating stacks and where shown on the drawings and in other positions as directed or necessary for cleaning, inspection pipes with door shall be provided, with a bolted oval recess door, shaped internally to bore of pipe.

B. VALVES, COCKS, TAPS, ETC

Draw-off taps and stop valves shall comply with B.S 1010: 1959.

Brass ball valves shall comply with B.S 1212: 1953 and copper floats for ball valves shall comply with B.S 1968: 1953, and plastic floats for same shall comply with B.S 2456: 1954.

Sluice valves shall comply with B.S 1218: 1946

Gates valves on main supply shall comply with B.S 3465.

Manually operated mixing valves for ablution and domestic purposes shall comply with B.S 2879: 1957.

Safety valves, stop valves and other safety fittings for air receivers and compressed air installations shall comply with B.S 1123: 1961.

Safety valves, for thermal storage water heaters shall comply with B.S 959 1967.

A. THERMAL INSULATION

Thermal insulating material for hot and cold water supply installation shall conform to B.S 1334: 1966, unless otherwise specified. The Contractor shall ensure that the thermal insulating materials used conform to the requirements of the Local Fire Authority.

All thermal insulating materials shall be delivered to the site in a dry condition and housed in a store until drawn upon for use.

All surfaces to be insulated shall be cleaned carefully before fixing the insulating material.

The installation of insulating materials shall be entrusted only to operatives skilled in the work. All insulating material, however fixed, shall be in close contact with the surface to which it is applied and all joints shall be sealed after ensuring that edges or ends of any section are built up close to one another. Edges or ends shall be cut either non-corrodible material or adequately protected against rust.

Each pipe or item shall be insulated separately.

Fixing of insulating material shall suit the progress of other installation works in the building.

Insulation, where pipes are fixed exposed, shall be pre-formed rigid sections with approved finish. Where pipes are fixed in close ducts, above false ceilings, etc., Mats cut in suitable sections on the site shall be used, well secured with copper or galvanised wire and finally covered with asphalt roofing paper.

Where subject to outside weather or other potential damp or wet conditions, the insulation shall be adequately protected against moisture pick-up.

If nothing else is specified, the minimum thickness of insulating material for cold and hot water pipes shall be as specified in B.S: Table 1.

B. SANITARY APPLIANCE

The installation of sanitary appliances shall be in accordance with C.P 305: 1952 and B.S 3202: 1959. The appliances shall be fixed in the positions shown on the drawings or as directed by the Architect.

For all sanitary appliances, the necessary number of supports, brackets, plugs, crews, washers, jointing materials, etc. shall be provided.

Where supports, brackets etc., are screwed to wall or structures, "Raw plugs" or similar shall be used. No traps for any appliances whatsoever shall have a seal less than 75mm.

Fixing shall, if required by the Architect, include for temporarily erecting appliances in the required position of service and discharge pipes, taking down, storing and permanently fixing after completion of wall finishing's and connecting to service and discharge.

Care shall be taken at all times and particularly after fixing, to protect appliances from damage.

Upon completion of the work, all appliances shall be cleaned of plaster, paint, etc., and carefully examined for defects.

A. FIRE FIGHTING EQUIPMENT

The specified firefighting shall be supplied and installed by the Contractor in the position shown on the Drawings.

Portable fire extinguishers shall comply with the following B.S

- | | | | |
|----|---|---|-----------------------|
| a) | Water type (soda acid) | - | B.S 138: 1948 |
| b) | Foam type (chemical) | - | B.S 740: part 1 : 948 |
| c) | Foam type (gas pressure) | - | B.S 740: Part 2: 1952 |
| d) | Water type (gas pressure) | - | B.S 1382 : 1948 |
| e) | Halogenated hydrocarbon type (carbon tetrochloride and chorobromomethane) | - | B.S 1721 : 1968 |
| f) | Carbon dioxide type- | | B.S 3326 : 1960 |
| g) | Dry powder type - | | B.S 3465: 1962 |
| h) | Water type (stored pressure) | - | B.S 3709 : 1964Fire |

hose couplings and ancillary equipment shall comply with B.S 336: 1965.

Hose reels: Hoses to be 20mm reinforced red rubber canvas double drained, to comply with B.S 3169: 1970. Waterway pressure castings machined throughout. Hose plates 560mm diameter steel. Inlet valve with inlet screwed $\frac{3}{4}$ " B.S.P controller plastic jet spray pattern and shut-off. Test pressure: 2.5kg/square centimetre. Finish fire red.

The installation of fire extinguishers shall be in accordance with CP 402: Part 3: 1964.

B. TESTING

The whole of the water and discharge installation shall be tested to the satisfaction of the Architect and the Local authority. The contractor shall provide all necessary testing apparatus and facilities for testing the installations and any defective work shall be replaced immediately and shall be the subject of re-testing until found satisfactory.

Where pipes are to be lagged, chased into walls or otherwise concealed, the work shall be tested prior to lagging, making good chases, etc.

All hot and cold water installations shall, if nothing else is specified be tested to 1.5 times normal working pressure, minimum 4kg/cm squared; and compressed air systems tested with minimum 10 kg/cm squared.

The test pressure shall be applied by means of a manually-operated test pump or, in the case of long mains or mains of large diameter, by a power-driven test pump. Pressure gauges shall be recalibrated before the test.

The test pressure shall be maintained by the pump for about one hour and a leak as specified in C.P 310, section 502 J, shall be approved, but any visible individual leak shall be repaired.

Valves, cocks and taps shall be absolutely tight under the test pressure for the corresponding pipes as well as under a small pressure.

Testing drain pipes shall be carried out in accordance with C.P 304, 1968. Testing

drain pipes shall be carried out in accordance with C.P 301: 1950

Tests shall, if necessary, be done in sections as work proceeds without extra payment.

All tests shall be carried out in the presence of a representative of the local authority and/or the Architect or his representative.

Upon completion of the work, including re-testing if necessary, the installation shall be thoroughly flushed out.

A. STERILISATION OF WATER SUPPLY PIPES

Sterilization shall be carried out strictly in accordance with C.P 310: 1065. The sterilization will not be approved unless the final test for residual chlorine mentioned in the above C.P proves positive.

B. COMMISSIONING

Before handing over, the contractor shall demonstrate to the Employer the methods of operation, limitations, and the maintenance requirements and safety precautions to be observed; and shall hand over any tools for operating. Cleaning, testing and maintenance of the installation.

On acceptance the Contractor shall provide the Employer with operation and maintenance instructions and any other documents of information appropriate to the installation.

C. MEASUREMENT

Prices for tubing shall include for all short lengths and sockets. Connectors, elbows, bends, formed bends, tees, reducing pieces and other fittings are measured separately and are to include for any extra joints and other extra reducing pieces which may be required, if the correct reducing tee is not available.

All pipes have been measured over all bends, tees and other fittings and the Contractor shall include in his prices for all cutting and waste.

DRAINAGE

A. SETTING OUT

Lines of drains shall be accurately set out and trenches excavated and bottoms trimmed to accurate gradients to approval before pipe laying commences.

B. DRAIN TRENCHES

Excavation shall be made to such depths and dimensions as may be required by the Architect to obtain proper falls and firm foundations. No permanent construction shall be commenced on any bottom until the excavation has been examined and approved by the Architect. Should the Contractor in error, or without the instructions of the Architect, make any excavation below the required level of the drain or bed, as the case may be, he will be required to refill such excavation to the correct levels with Class 15 concrete at his own expense.

Prices for excavation must include for excavating in all materials met with and for trimming bottoms to the necessary falls and for any extra excavation required for planking and strutting and working space, all as described under "Excavation". Excavation in hard rock requiring the use of compressors or wedging is measured separately.

C. KEEP EXCAVATIONS DRY

The Contractor shall keep the whole of the trenches or other excavations free from water, and he shall execute such works and install such pumps as may be required to keep the excavations dry at all times. No subsoil water shall be discharged into the sewers without the written permission of the architect.

D. PITCH FIBRE DRAIN PIPES AND FITTINGS

Pitch fibre drain pipes and fittings shall be to B.S 2760 and of approved manufacture. Joints shall be made with straight couplings as indicated in the B.S and the laying, cutting and jointing shall be carried out strictly in accordance with the manufacturer's printed instructions.

E. CAST IRON DRAIN PIPES

Cast iron drain pipes shall be coated cast iron spigot and socket pipes conforming with B.S 437 in all respects and with fittings to B.S 1130. Pipes shall be jointed with asbestos yarn and caulked with molten lead or jointed with special jointing compound, all to approval.

F. SPUN CONCRETE CYLINDRICAL DRAIN PIPES AND FITTINGS

Spun concrete drain pipes shall be to B.S 556 part 2 of approved manufacturer. Flexibly jointed pipes shall have spigot and socket joints made with rubber joint rings to B.S 2994 part 2. Rigidly jointed pipes shall have spigot joints made with proprietary rubber gasket or three turns of tarred gaskin or tallowed yarn caulked to not more than one quarter of the socket joint and cement mortar 1:2 struck off at 45 degrees.

G. UPVC DRAIN PIPES AND FITTINGS

UPVC drain pipes and fittings shall be to B.S 4660 of approved manufacture, with lip seal socketed joints, laid in accordance with the manufacturer's instructions.

A. BACKFILLING

The first backfilling of pipe trenches is to be soft material free from stones and shall be watered and carefully tamped over and around the pipes in 300mm layers until they are covered to a depth of 600mm. Subsequent filling is to be in 150mm layers, watered and rammed. Only materials approved by the Architect are to be used as backfilling.

Where hardcore is used for backfilling it is not to exceed 150mm gauge and all interstices shall be properly filled with small pieces and fine binder. Surplus excavated materials are to be removed from the site.

If, in the opinion of the Architect, care has not been exercised in refilling trenches, he may order a fresh test to be made on the drain. In the event of the drain failing to pass the test the Contractor will be required to remedy the fault at his own expense.

B. CONCRETE BEDS AND SURROUNDS

Concrete beds and surrounds shall be Class 25 concrete to the thicknesses and widths specified.

Where pipes are specified to be hunched, the concrete shall be carried up from the outside edge of the bed to meet the pipe barrel tangentially.

Where pipes are specified to be surrounded, the concrete shall be carried up from the bed in a square section with a minimum of 150mm in thickness over the barrel of the pipe.

Rates for beds and surrounds shall include for forming recesses and filling with concrete, for mortar layer, etc., and for any necessary formwork.

C. LAYING PIPES

Each pipe shall be carefully examined on arrival; any defective pipes shall be removed immediately from the Site and not used in the Works. Minor damage to the protective coating of cast iron pipes shall be made good by painting with hot tar; if major defects in the coating exist, such pipes shall be rejected and removed from the site.

Drains shall be laid in straight lines and to even gradients as required and to the satisfaction of the Architect.

Great care shall be exercised in setting out and determining the levels of the pipes and the Contractor shall provide suitable instruments and set up and maintain all sight rails, boning rods and bench marks, etc., necessary for the purpose.

All drains shall be kept free from earth, debris, superfluous cement and other constructions or water during laying and until completion of the Contract when they shall be handed over in a clean condition.

Pipes shall be laid with the sockets leading uphill and shall rest on solid and even foundations for the full length of the barrel, socket recesses shall be formed in the foundation as short as practicable but sufficiently deep to allow the pipe jointer room to work right round pipe. Such recesses shall be filled with cement mortar (1:4) on completion of Laying.

A. INSPECTION CHAMBERS

Inspection chambers shall be constructed in the positions indicated on the drawings or as required by the Architect. Such chambers shall be to the depths required to obtain even gradients in the drain and of sufficient size to contain the requisite main channel and any branches thereto and all to the entire satisfaction of the Architect and the local authority.

Rendering shall be trowelled smooth, coved at all internal angles and rounded on arises.

B. TESTING

Each length of drain and manhole shall be tested as described hereinafter and approved by the Engineer before any backfilling of the trench takes place.

Testing shall not be carried out until at least 12 hours have elapsed after the jointing of the last pipe. The test

shall be as follows: -

- i) The lower end of the pipe and all junctions shall be securely stopped and the whole length under test filled with water.
- ii) When full, a further stopper shall be inserted at the top leaving a pipe attached to the drain plug. This pipe shall be bent through 90° and shall terminate in header tank 225mm square. The vertical distance between the concrete line of the drain plug and the top of the header tank shall be not less than 900mm.
- iii) Water shall then be poured into the header tank which shall be kept full for a minimum period of 3 hours to allow absorption to take place. At the expiration of this period the header tank shall be topped up and the testing of the drain commenced. If, after a further period of 30 minutes, the water level in the header tank has not fallen by more than 2mm the test will be considered satisfactory.
- iv) In the event of the pipe failing to withstand the test, the point of failure shall be completely surrounded, at the contractor's expense, with class 25 concrete 19mm maximum aggregate; so that there is a minimum cover of 150mm in all directions. The length shall then be re-tested.
- v) Immediately a length of drain has been approved the trench shall be backfilled for a depth of at least 300mm above the top of the pipes.

C. GULLEYS

Gulleys shall be approved 100mm salt glazed stoneware or cast iron trapped gully's with 150 x 150mm cast iron gratings to receive the waste fittings. Bed the gully's on and surround with class 25 concrete 100mm thickness, carried up to form a 75 x 75mm kerb with all exposed surfaces finished in cement and sand (1:2) trowelled hard and smooth and all angles rounded. Make good cement joint to drain pipe and run drain to adjacent manhole.

D. MEASUREMENT

Drain pipes have been measured over all bends, junctions and other fittings, and the contractor shall include in his prices for all joints, short lengths, cuttings and waste. Prices for bends, junctions, etc., shall include for the extra joints, cuttings water and any extra labour required.

PAINTING AND DECORATING

A. APPROVED SPECIALIST

All work under this trade must be executed by an approved specialist.

B. GENERALLY

The Contractor shall so arrange his programme of work that all other trades are completed and away from the area to be painted, when painting begins. Before painting the contractor must remove all stains from and obtain uniform colour to work to be oiled and polished.

All plaster, metal, wood or other surfaces which are to receive finishes of paint, stain, polish, distemper or paintwork of any description are to be carefully inspected by the contractor before he allows any of his painters to commence work. The contractor will be held solely responsible for all defective work condemned as a result of his painter's failure to insist on receiving from the other trades surfaces in the proper condition to allow first-class finishes of the various kinds specified being applied to them.

C. PAINTING GENERALLY

All materials are to be of the best quality and shall be of an approved proprietary brand selected from the latest schedule of approved paints issued by the ministry of works.

All materials to be applied externally shall be of exterior quality and/or recommended by the manufacturers for external use.

All materials shall be delivered on site intact in the original sealed drums or tins and shall be mixed and applied strictly in accordance with the manufacturer's instructions and to the approval of the Architect.

Unless specially instructed or approved by the Architect, no paints, distemper, etc., are to be thinned, or otherwise adulterated, but are to be as supplied by the manufacturers and direct from the tins.

If required by the Architect the contractor is to provide at his own expense samples of paints, etc., with containers and cases to be forwarded carriage paid by the contractor for analysis to a laboratory.

The priming, undercoats and finishing coats shall each be of differing tints and the priming and undercoat shall be the correct brands and tints to suit the respective finishing coats, in accordance with the manufacturer's instructions. All finishing coats shall be of colours and tints selected by the Architect. Each coat must be approved by the Architect before the next coat is applied.

Each coat shall be properly dry and in the case of oil or enamel paints shall be well rubbed down with fine glass paper before the next coat is applied. The paintwork shall be finished smooth and free from brush marks.

Colour codes of all paints, etc., shall be submitted to and samples prepared for approval of the Architect before Laying on and such samples, when approved, shall become the standard for work.

All paints, emulsion paints, and distempers shall be applied by means of a brush or spray gun or rollers of an approved type, where so agreed by the Architect.

No painting is to be done on surfaces which are not thoroughly dry.

Prices of paint, distemper, etc., shall include for preparation of surfaces, rubbing down between each coat, stopping, knotting, etc., and all other work in connection and as described and as necessary to obtain a first-class and proper finish to approval.

Emulsion paint on ceilings and all undercoats of emulsion paint and complete oil painting on walls shall be completed before thermoplastic floorings are laid. Final coats of emulsion paint on walls shall be applied after such floorings have been laid complete.

A. SAMPLES

The contractor shall furnish at the earliest possible opportunity before work commences and at his own cost, samples of painting for the Architect's approval and any further samples in the case of rejection until such samples are approved by the Architect and such samples, when approved, shall be the minimum standard for the work to which they apply.

The Architect may reject any materials or workmanship not in his opinion up to the approved sample and these must be removed from the site without delay.

B. WOOD PRESERVATIVE

All woodwork in contact with walling or plaster shall be treated after cutting and preparation but before assembly or fixing with one coat of "TIMCIDE" wood preservative manufactured by Timsales Ltd, P.O Box 18080, Nairobi All other equal and approved. The solution is to be brushed on all faces of all timbers unless exposed to view and painted.

The contractor shall note that this solution is POISONOUS and shall take all necessary precautions and instruct his workmen accordingly.

C. WAX POLISH

Wax polish shall be furniture polish of an approved brand and wood surfaces shall be clean, smooth, and free from oil or grease or any other blemishes. A minimum of two coats shall be applied to approval.

D. PREPARATION AND PRIMING OF PLASTER, ETC SURFACES

Plaster surfaces shall be perfectly smooth, free from defects and ready for decoration. All surfaces shall be allowed to dry for a minimum period of six weeks, stopped with approved plaster compound stopping and rubbed down flush, as necessary, and then be thoroughly brushed down and left free from all efflorescence, dirt and dust immediately prior to decorating.

Plaster surfaces which are to be finished with emulsion, oil or enamel paint, shall be primed with an alkali resisting primer complying with the particular paint manufacturer's specification and applied in accordance with their instructions.

Fiberboard or similar surfaces shall be lightly brushed down to remove all dirt, dust and loose particles and have all nail holes or other defects stopped with an approved plaster compound stopping, rubbed down flush and left with a texture to match surrounding material and shall receive one coat petrifying liquid as last.

A. PREPARATION AND PRIMING OF METAL ETC SURFACES

All surfaces shall be thoroughly brushed down with wire brushes and scraped where necessary to remove all scale, rust, etc., immediately prior to decorating. Where severe rust exists and if approved by the Architect as proprietary, derusting solution may be used in accordance with the manufacturer's instructions.

Shop-primed and unprimed surfaces shall be given one coat of metal chromate primer.

Galvanized surfaces shall be treated before painting with an approved proprietary mordant or de-greasing solution before priming.

Coated surfaces shall be treated with bituminous solution and shall be scraped to remove soft parts and then receive two isolating coats of aluminium primer or other approved anti-tar primer.

B. PREPARATION AND PRIMING OF WOODWORK

All woodwork shall be rubbed down, all knots covered with a thick coat of good shellac or aluminium knotting; primed with one coat of approved ready mixed proprietary wood primer

and all cracks, nail holes, defects and uneven surfaces, etc., stopped and faced up with hard stopping rubbed down flush.

C. PREPARATION OF PREVIOUSLY PAINTED METAL SURFACES

Thoroughly wash down with water containing an approved cleaning agent and rinse with clean water. Wire brush to remove all rust and loose paint and touch up bare patches with zinc-rich primer.

D. PREPARATION OF PREVIOUSLY PAINTED WOODWORK

Thoroughly wash down with water containing an approved cleaning agent and rinse with clean water. Lightly rub down with glass paper and prime and bring forward all bare patches for decoration.

E. PREPARATION OF PREVIOUSLY PAINTED PLASTER, ETC. SURFACES

Thoroughly wash down with water containing an approved detergent to remove stains and rinse with clean water. Make good all defects (cracks and the blemishes) with plaster, sand/cement or polyfilla (on internal surfaces) of same porosity as wall surface. Rub down with sand paper and dust clean.

F. EMULSION PAINT

After preparation as specified above, a minimum of THREE coats, unless otherwise specified, shall be applied using a thinning medium of water only if and as recommended by the manufacturer.

An approved plaster primer tinted to match may be substituted for the first coat in three-coat work.

G. ENAMEL PAINT

Apply two undercoats and one finishing coat, after preparation and priming as specified above.

PAINTING AND DECORATING

D. APPROVED SPECIALIST

All work under this trade must be executed by an approved specialist.

E. GENERALLY

The Contractor shall so arrange his programme of work that all other trades are completed and away from the area to be painted, when painting begins. Before painting the contractor must remove all stains from and obtain uniform colour to work to be oiled and polished.

All plaster, metal, wood or other surfaces which are to receive finishes of paint, stain, polish, distemper or paintwork of any description are to be carefully inspected by the contractor before he allows any of his painters to commence work. The contractor will be held solely responsible for all defective work condemned as a result of his painter's failure to insist on receiving from the other trades surfaces in the proper condition to allow first-class finishes of the various kinds specified being applied to them.

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All materials to be applied externally shall be of exterior quality and/or recommended by the manufacturers for external use.

All materials shall be delivered on site intact in the original sealed drums or tins and shall be mixed and applied strictly in accordance with the manufacturer's instructions and to the approval of the Architect.

Unless specially instructed or approved by the Architect, no paints, distemper, etc., are to be thinned, or otherwise adulterated, but are to be as supplied by the manufacturers and direct from the tins.

If required by the Architect the contractor is to provide at his own expense samples of paints, etc., with containers and cases to be forwarded carriage paid by the contractor for analysis to a laboratory.

The priming, undercoats and finishing coats shall each be of differing tints and the priming and undercoat shall be the correct brands and tints to suit the respective finishing coats, in accordance with the manufacturer's instructions. All finishing coats shall be of colours and tints selected by the Architect. Each coat must be approved by the Architect before the next coat is applied.

Each coat shall be properly dry and in the case of oil or enamel paints shall be well rubbed down with fine glass paper before the next coat is applied. The paintwork shall be finished smooth and free from brush marks.

Colour codes of all paints, etc., shall be submitted to and samples prepared for approval of the Architect before Laying on and such samples, when approved, shall become the standard for work.

All paints, emulsion paints, and distempers shall be applied by means of a brush or spray gun or rollers of an approved type, where so agreed by the Architect.

No painting is to be done on surfaces which are not thoroughly dry.

Prices of paint, distemper, etc., shall include for preparation of surfaces, rubbing down between each coat, stopping, knotting, etc., and all other work in connection and as described and as necessary to obtain a first-class and proper finish to approval.

Emulsion paint on ceilings and all undercoats of emulsion paint and complete oil painting on walls shall be completed before thermoplastic floorings are laid. Final coats of emulsion paint on walls shall be applied after such floorings have been laid complete.

E. SAMPLES

The contractor shall furnish at the earliest possible opportunity before work commences and at his own cost, samples of painting for the Architect's approval and any further samples in the case of rejection until such samples are approved by the Architect and such samples, when approved, shall be the minimum standard for the work to which they apply.

The Architect may reject any materials or workmanship not in his opinion up to the approved sample and these must be removed from the site without delay.

F. WOOD PRESERVATIVE

All woodwork in contact with walling or plaster shall be treated after cutting and preparation but before assembly or fixing with one coat of "TIMCIDE" wood preservative manufactured by Timsales Ltd, P.O Box 18080, Nairobi All other equal and approved. The solution is to be brushed on all faces of all timbers unless exposed to view and painted.

The contractor shall note that this solution is POISONOUS and shall take all necessary precautions and instruct his workmen accordingly.

G. WAX POLISH

Wax polish shall be furniture polish of an approved brand and wood surfaces shall be clean, smooth, and free from oil or grease or any other blemishes. A minimum of two coats shall be applied to approval.

H. PREPARATION AND PRIMING OF PLASTER, ETC SURFACES

Plaster surfaces shall be perfectly smooth, free from defects and ready for decoration. All surfaces shall be allowed to dry for a minimum period of six weeks, stopped with approved plaster compound stopping and rubbed down flush, as necessary, and then be thoroughly brushed down and left free from all efflorescence, dirt and dust immediately prior to decorating.

Plaster surfaces which are to be finished with emulsion, oil or enamel paint, shall be primed with an alkali resisting primer complying with the particular paint manufacturer's specification and applied in accordance with their instructions.

Fiberboard or similar surfaces shall be lightly brushed down to remove all dirt, dust and loose particles and have all nail holes or other defects stopped with an approved plaster compound stopping, rubbed down flush and left with a texture to match surrounding material and shall receive one coat petrifying liquid as last.

H. PREPARATION AND PRIMING OF METAL ETC SURFACES

All surfaces shall be thoroughly brushed down with wire brushes and scraped where necessary to remove all scale, rust, etc., immediately prior to decorating. Where severe rust exists and if approved by the Architect as proprietary, derusting solution may be used in accordance with the manufacturer's instructions.

Shop-primed and unprimed surfaces shall be given one coat of metal chromate primer.

Galvanized surfaces shall be treated before painting with an approved proprietary mordant or de-greasing solution before priming.

Coated surfaces shall be treated with bituminous solution and shall be scraped to remove soft parts and then receive two isolating coats of aluminium primer or other approved anti-tar primer.

I. PREPARATION AND PRIMING OF WOODWORK

All woodwork shall be rubbed down, all knots covered with a thick coat of good shellac or aluminium knotting; primed with one coat of approved ready mixed proprietary wood primer

and all cracks, nail holes, defects and uneven surfaces, etc., stopped and faced up with hard stopping rubbed down flush.

J. PREPARATION OF PREVIOUSLY PAINTED METAL SURFACES

Thoroughly wash down with water containing an approved cleaning agent and rinse with clean water. Wire brush to remove all rust and loose paint and touch up bare patches with zinc-rich primer.

K. PREPARATION OF PREVIOUSLY PAINTED WOODWORK

Thoroughly wash down with water containing an approved cleaning agent and rinse with clean water. Lightly rub down with glass paper and prime and bring forward all bare patches for decoration.

L. PREPARATION OF PREVIOUSLY PAINTED PLASTER, ETC. SURFACES

Thoroughly wash down with water containing an approved detergent to remove stains and rinse with clean water. Make good all defects (cracks and the blemishes) with plaster, sand/cement or polyfilla (on internal surfaces) of same porosity as wall surface. Rub down with sand paper and dust clean.

M. EMULSION PAINT

After preparation as specified above, a minimum of THREE coats, unless otherwise specified, shall be applied using a thinning medium of water only if and as recommended by the manufacturer.

An approved plaster primer tinted to match may be substituted for the first coat in three-coat work.

N. ENAMEL PAINT

Apply two undercoats and one finishing coat, after preparation and priming as specified above.

A. CLEAR POLYURETHANE VARNISH

Surfaces are to be treated with "Ronseal" or other equal and approved, in three coats. The first is to be applied with a linen pad and well rubbed in and second and successive coats are to be applied by brush. The first and second coats are to be lightly rubbed with Grade 'O' and Grade 'OO' wire respectively.

B. POLYURETHANE CLEAR LACQUER

To be applied strictly as per the manufacturer's instructions.

C. IRONMONGERY

All ironmongery shall be removed from joinery, steel windows and louvers before painting is commenced, and shall be cleaned and renovated if necessary and re-fixed after completion of painting.

D. PAINTING ITEMS

Painting items as billed hereafter shall include for preparing all priming surfaces as above described.

E. COVER UP

Cover up all floors, fittings, etc., with dust sheets when executing all painting and decorating work.

F. CLEAN AND TOUCH UP

Paint splashes, spots and stains shall be removed from floors, woodwork, etc., and damaged surfaces touched up and the whole of the work left clean and perfect upon completion.

EXTERNAL WORKS

DRIVEWAY AND PARKING AREAS

E. EXCAVATIONS

Excavations to areas to receive bitumen macadam or other road or paved finish shall be carried out in a manner ensuring that excavation plant and vehicles do not cause failure more than 250mm in the sub-grade. Wheel loads and tyre pressures shall be limited and work shall be interrupted to let the sub-grade dry out as necessary to avoid such sub-grade failure.

If shear failure more than 250 mm deep occurs in the sub-grade, the grade, the soil affected shall be excavated and replaced by soil filling as described.

If the soil develops a highly elastic condition as excavation approaches formation level, excavations shall be interrupted until the excess pore consequently disappears.

Before any further work is executed the formation level must be inspected and approved by the engineer.

A. COMPACTION

The sub-grade shall be compacted by a smooth-wheeled roller of 8 to 10 tonnes weight or vibrating roller of minimum 1,300kg, or other approved plant. The number of coverages shall be at least 10 and there shall be a 50% overlap of successive coverage. If so instructed by the Engineer, water shall be added during compaction to obtain optimum water content. Filling shall be compacted as above but in minimum, 200mm deep layers.

B. SUB-GRADE SURFACE FINISH

The surface of the sub-grade shall be finished to the levels, falls and cross falls shown on the drawings within the following tolerances: -

The level shall not be above and not more than 50mm below the level shown on the drawings. The falls shall be within 10% of the falls shown on the drawings.

The smoothness shall be such that departures from a 3 metre straight edge laid in any direction shall not exceed 50mm and there shall be no ponding of water.

C. COARSE AGGREGATE

Coarse aggregate for the base shall be crushed stone or rock conforming to the following requirements: -

- i) It shall be from sound, hard, igneous rock, limestone, quartzite or hard coral, and shall be free from weathered or disintegrated stone, clay, organic or other foreign matter.

The shape shall be roughly cubical and the grading shall conform to: -

Passing 75mm standard sieve:	100%
Passing 38mm standard sieve:	20 - 80%
Passing 19mm standard sieve:	0 - 20%

D. CRUSHER DUST

Crusher dust shall mean material in accordance with the table for 5mm nominal maximum size below.

B.S Sieve Size	Percentage Passing
5mm	100
No. 7	80 - 100
No. 14	50 - 80
No. 25	30 - 60
No. 52	20 - 45
No. 200	10 - 25

Notes:

- i) Not less than 10% shall be retained between each pair of successive sieves specified for use, excepting the largest pair.
- ii) The material passing the No. 36 sieve shall have the following characteristics (B.S 377):-

Liquid limit not exceeding 25% Plasticity
Index not exceeding 8%

A. CRUSHER FINES (2 to 10mm)

All the material in crusher fines shall pass the 13. B.S. sieve and be retained on the No. 25 B.S sieve, evenly graded with no excess of any size.

B. SUB-BASE

The material for use in the sub-base shall consist of crusher dust as described, or other approved material. It shall be placed in one layer of such thickness that when compacted it shall attain the finished thickness shown on the drawings. The material shall be watered as necessary and compacted as described. The sub-base material shall have a CBR value (unsoaked) of not less than 25.

C. BASE

The material for use in the base course shall consist of one layer of coarse aggregate as described of which the interstices are filled with fine material consisting either of crusher dust or a mixture of crusher fines. The proportions of crusher dust and crusher fines in the fine material shall be such as to obtain the maximum density of base course when compacted

The procedure for construction shall be as follows: The coarse aggregate shall be placed in a layer of such thickness so as to obtain the required thickness after compaction. it shall then be compacted lightly until the Engineer is satisfied that a layer true to shape and level has been obtained. The fine material shall be spread over the layer by hand or by mechanical means. The application of fine material shall be made gradually in successive layers not exceeding 25 mm in thickness and each layer shall be worked into the voids in the coarse aggregate before the application of the succeeding layer. The fine material shall be laid as described and brushed into the coarse aggregate and rolled and consolidated by an approved vibrating roller to feed fines to the bottom of the layer.

Additional blinding material shall be applied as above until the surface will accept no more. In no case shall the blinding material be applied so thickly that it cakes or bridges on the surface in such a manner as to prevent the direct bearing of the roller or other compacting plant on the stones.

Final compaction shall be by an 8-10 tonnes smooth-wheeled roller until there is no visible movement under the action of the roller and until the required tolerance are achieved. Water may be applied during final compaction subject to the Engineers approval.

Compaction shall in any case achieve 100% maximum dry density in accordance with B.S 1377.

D. QUARRY WASTE

Quarry waste shall mean material to the same specification as crusher dust, except as follows: -

- i) The plasticity index taken on material passing the No. 36 sieve shall not exceed 16%
- ii) The material may have up to 35% of stones not larger than 38mm, provided that the material passing the 5mm sieve is within the limits specified.

Quarry waste shall be clean and completely free from earth, organic or other foreign matter.

A. BASE COURSE FINISH

The surface of the base course shall be finished to the levels, falls and cross falls shown on the drawings subject to the following tolerances,

The level shall be within + or - 12mm of the levels shown on the drawings. The falls shall be within 10% of the falls shown on the Drawings

The smoothness shall be such that departures from a 3 metre straight edge laid in any direction shall not exceed 12mm.

The surface of the base course shall be inspected and approved by the Engineer before bitumen paving is commenced.

B. BITUMEN PRIMING COAT

Immediately before applying the priming coat, the surface of the base course shall be brushed free from dust and loose stones. The material for the priming coat shall be cutback bitumen of M.C.O. grade or other approved.

Approximately 30 minutes before applying the priming coat the surface of the base course should be made slightly damp by use of a water spray. The priming coat shall be applied at a temperature of 100 - 150 degrees Fahrenheit and at rate 0.60 litres per square metre.

After application of the primer, a period of at least two days shall elapse before the road surfacing is applied. During this period all traffic shall be kept off the treated surface.

C. BITUMEN MACADAM SURFACING

A single course open graded premix of 30 mm to 40 mm compacted thicknesses shall be used with a seal coat.

Coarse aggregate shall be crushed black trap with particles having a cubicle shape to the Engineers approval and shall be washed free from dust.

The coarse aggregate grading's shall be: -

Sieve size	Percentage passing
19 mm	100
13 mm	60 - 100
10 mm	45 - 70
6 mm	30 - 50
4 mm	25 - 40
4 mesh	15 - 25
8 mesh	2 - 5
200 mesh	

The binder shall be Shellmac MC/RC2 or other approved. The percentage by weight of binder shall be 4.5%. Mixing shall be in an approved mixer and mixing shall proceed until the stone is evenly coated with binder. The temperature (at mixing) shall be within the following range: -

Aggregate

Binder

Mixing Temperature: 500 - 950F

1250 - 1500 F

The laying temperature shall be not less than 200 F below the mixing temperature.

The mix shall be spread evenly over the primed surface and shall be thoroughly compacted by rolling with a minimum of 6 passes. A smooth-wheeled roller of not less than 5 tonnes weight and with rear wheel loading of 0.25kg. Per square millimetre width shall be used.

A. ROLLING

Any longitudinal joints shall be rolled first, after which rolling shall start longitudinally at the side and proceed towards the centre of the carpet. Each pass of the roller shall overlap the preceding one by at least one half width of the rear wheel. Alternate passes of the roller shall be of varying length. Immediately following initial compaction, the surface shall be checked with a straight edge to ensure that it meets the surface finish requirements. Minor variations shall be corrected by rolling, but major imperfections shall be compacted by adding or taking away mix while it is still workable.

B. SURFACE FINISH

The surface of the bitumen macadam shall be finished to the levels, contours and slopes shown on the Drawings with the following tolerances: -

- i) The level shall be within + or -6mm of the level shown on the drawings
- ii) The gradient shall be within 10% of the gradient shown on the drawings
- iii) The smoothness shall be such that departures from a 3 metre straight edge laid in any direction shall not exceed 6mm.

C. SEAL COAT

The seal coat shall consist of pre-coated fines consisting of crushed black trap stone graded from 3mm to dust, or coarse sand. The binder shall consist of 4.5% by weight of MC/RC2. The seal coat shall be spread and brushed into the macadam surface at the rate of 180 square meters per tonne and compacted by rolling as for the macadam.

FENCING

D. CONCRETE POSTS AND STRUTS, GENERALLY

Concrete posts and struts shall be manufactured to BS 1722: part 1, Appendix A by an approved manufacturer, using concrete class 20 (10mm) and reinforced in accordance with the following table: -

Intermediate posts not exceeding 2450 mm long	4 No. 6mm bars
Intermediate posts exceeding 2450 mm long	4 No. 8mm bars
Straining posts not exceeding 2450 mm long	4 No. 8mm bars
Straining posts exceeding 2450 mm long	4 No 10mm bars
Struts not exceeding 2450 mm long	4 No. 6mm bars
Struts exceeding 2450 mm long	4 No. 8mm bars

Bars shall be made up into cages with 12 SWG stirrups at centres not exceeding 380mm. Bars shall extend to 25mm from the end of the post or strut and have minimum cover of 16mm.

A. CONCRETE POSTS AND STRUTS FOR CHAINLINK FENCES Concrete posts

and struts for chain link fences shall be to B.S 1722: part 1, table 3.

B. CONCRETE POSTS AND STRUTS FOR STRAINED WIRE FENCES Concrete

posts and struts for strained wire fences shall be to B.S. 1722: Part 3, table 2.

C. STEEL ANGLE POSTS AND STRUTS GENERALLY

Steel angle posts and struts shall be to B.S. 1722: part 1 & 3. Angle shall be to B.S. 4: part 1 and B.S. 4360 with ends ragged for casting in and supplied primed with one coat of red oxide to B.S. 2524.

D. STEEL HOLLOW SECTION POSTS AND STRUTS

Steel hollow section posts and struts shall be to B.S. 1722: part 1 & 3. Sections shall be to B.S. 4: part 2 and B.S. 4360 with ragged ends for casting in and supplied primed with one coat of red oxide to B.S. 2524.

E. STEEL TUBE POSTS AND STRUTS

Steel tubes for posts and struts shall be B.S 1775, with ragged ends for casting in and supplied primed with one coat of red oxide to B.S 2524.

F. STEEL ANGLE, HOLLOW SECTION AND TUBE POSTS AND STRUTS FOR CHAINLINK FENCING

Steel angle, hollow section and tube posts and struts for chain link fencing shall be to B.S 1722: Part 1, Tables 4A and 4B.

G. TIMBER POSTS AND STRUTS FOR STRAINED WIRE FENCING

Timber posts and struts for strained wire fencing shall be cedar of diameters specified, reasonably straight and free from bark and excessive sapwood with tops cut at a slight angle to shed water. Straining posts shall be notched for struts.

H. GALVANISED LINE WIRE

Galvanised line wire for chain link fencing shall be B.S 4102 of the following diameters: -

Medium pattern chain link	3 mm
Heavy pattern chain link	3.55 mm
Extra heavy pattern chain link	4 mm

Galvanised line wire for strained wire fencing shall be to B.S 4102 and 4mm diameter.

A. GALVANISED TYING WIRE

Galvanised tying wire shall be to B.S 4102 and 2 mm diameter.

B. GALVANISED BARBED WIRE

Galvanised barbed wire shall be to B.S 4102 of two strands of 2.5mm line wire with barbs of 2 mm point wire at centres not exceeding 90 mm.

C. GALVANISED CHAINLINK

Galvanized chain link shall be to B.S 4102: table 6 of the pattern specified, of 50mm mesh and of the following wire diameters: -

Medium pattern chain link	2.5mm
Heavy pattern chain link	3mm
Extra heavy pattern chain link	3mm

D. EXTENSION ARMS

Extension arms for barbed wire shall be of mild steel to B.S. 1722: part 1, cranked at 45 degrees and slotted for three strands of barbed wire at centres not exceeding 150mm.

Arms for concrete, steel and timber intermediate posts shall be of 35 x 6mm mild steel flat. Arms for concrete and timber straining posts shall be of 50 x 50 x 6mm mild steel angle. Arms for steel straining posts shall be of similar section to the post.

E. SUNDRIES

Galvanized steel eye bolt strainers and winding brackets shall be to B.S. 1722 Bolts, nuts and washers shall be ISO metric to B.S. 4190

Galvanized wire staples shall be to B.S 1494: part 2:-9 S.W.G. x 32mm. Black

bitumen coating solution shall be to B.S 3416: type 1

F. PREPARING POSTS

Timber posts shall be drilled for line wire at the height specified, notched for struts in the top third of the exposed pole, and coated at the bottom end with bitumen to a height 300mm above ground level.

Steel posts and struts shall be drilled for connection by two 10mm diameter bolts at a point in the top third of the exposed post.

A. FIXING POSTS

Straining posts shall be provided at all ends and changes of direction or level and in straight runs at intervals not exceeding 50 metres.

Struts shall be fitted to straining post in the direction of each line of fencing. Intermediate posts shall be provided at intervals not exceeding 3 metres.

Post and strut holes shall be excavated not less than 450 x 450mm on plan: 600mm deep for fences not exceeding 1400mm high and 750mm deep for fences exceeding 1400mm high.

Concrete bases shall be as specified and not less than half the depth of the post holes. Wires and fencing shall not exert strain at least seven days after posts are fixed in bases.

B. FIXING LINE WIRES

Lines wires shall be threaded through posts, connected to eye bolt strainers at ends and angles and strained taut to approval.

C. FIXING BARBED WIRE

Barbed wire shall be slotted into steel extension arms, stapled to timber posts or wired firmly to concrete posts as specified and strained taut to approval.

D. FIXING CHAIN LINK

Chain link fencing shall be wired firmly to each line wire at horizontal centres not exceeding 600 mm.

LANDSCAPING

E. GENERAL PLANTING PREPARATION

All imported red soil and manure be free of roots, weeds and debris. Manure is to be dry and well-rotted. It must be either horse, cow or chicken manure.

Remove all stones, branches and debris, etc. from planting areas.

All lawn areas should be 15mm higher than adjacent shrub beds and paved ones.

Where possible, all planted areas must slope gently (1% slope) away from built structures unless specified. Grass seedlings/root cuttings must be free of weeds and any other species of grass

Trees and shrubs must be in a healthy condition and free from pests and diseases, with a well-developed root-ball.

F. LAWN INSTALLATION

Remove all natural debris and rocks larger than 40mm in diameter

Cultivate to a depth of 250mm to break up large lumps of soil. Mix the improved red soil with black cotton soil in 1:1 ratio (where necessary).

Add 15mm of every dry rotted manure to the surface of the soil and cultivate into the soil to a depth of 150mm. Add 10gm of general fertilizer DAP per square metre and work into the soil.

Grade and rake the surface of the soil to a smooth surface.

Plant grass seedlings at a depth of 50mm, exposing only a small amount of leaf, 100mm apart. Water thoroughly.

Water as required and remove weeds as soon as they appear.

A. TREE, SHRUB AND GROUND COVER INSTALLATION

- a) Excavate a hole not less than 750mm deep and 900mm wide for each shrub and 1000mm deep and 1500mm wide for each tree. (Where there are several shrubs planted together in a shrub bed, the entire area of the shrub bed is to be excavated). For groundcover, a depth of 300mm is adequate.
- b) Remove soil and prepare a planting mixture as follows: -6
parts good red topsoil
1 part dry well rotted manure
250g general fertilizer (20:20:20) for shrubs and 500g for trees
- b) Water the hole prior to backfilling
- c) Return two-thirds of the soil mixture to the hole and make sure there are no air pockets.
- d) Remove plant from container and place in hole so that the soil mark around the stem of the plant is level with the top of the hole
- e) Add rest of the soil mixture, firming gently.
- f) Raise the surface around the rim of the original hole to create a saucer for watering.
- g) Water the plant thoroughly
- h) Stake the trees on windward side where necessary.

PART III - THE CONDITIONS OF CONTRACT AND CONTRACT

SECTION VIII - GENERAL CONDITIONS OF CONTRACT (GCC)

Murang'a University of Technology

Proposed construction of Tuition Block Phase II

University of Nairobi Enterprise Services, P.O. Box 30197-00100, NAIROBI, KENYA.

General Conditions of Contract

1 GENERAL PROVISIONS

1.1 Definitions

In this Contract, except where context otherwise requires, the following terms shall be interpreted as indicated below. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

“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.

“Base Date” means a date 30 day prior to the submission of tenders.

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

“Completion Date” means the date of completion of the Works as certified by the Engineer.

“Contract Price” means the price defined in the contract and there after as adjusted in accordance with the provisions of the Contract.

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

“Contractor's Documents” means the calculations, computer programs and other software, progress reports, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

“Contractor's Equipment” means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Procuring Entity's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

“Contractor's Personnel” means the Contractor's Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labor and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

“Contractor's Representative” means the person named by the Contractor in the Contract appointed from time to time by the Contractor who acts on behalf of the Contractor.

“Contractor” means the person(s) named as contractor in the Form of Tender accepted by the Procuring Entity.

“Cost” means expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

“Day” means a calendar day and **“year”** means 365 days.

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

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

“Defects Liability Certificate” means the certificate issued by Architect upon correction of defects by the Contractor.

“Defects Liability Period” means the period named in the Special Conditions of Contract and calculated from the Completion Date, within which the contractor is liable for any defects that may develop in the handed over works.

“Defects Notification Period” means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], which extends over the days stated in the Special Conditions of Contract.

“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.

“Final Payment Certificate” means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].

“Final Statement” means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].

“Force Majeure” is defined in Clause 19 [Force Majeure].

“Foreign Currency” means a currency of another country (not Kenya) in which part (or all) of the Contract Price is payable, but not the Local Currency.

“Goods” means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

“Interim Payment Certificate” means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.

“Laws” means all national legislation, statutes, ordinances, and regulations and by-laws of any legally constituted public authority.

“Letter of Acceptance” means the letter of formal acceptance of a tender, signed by Procuring Entity, including any annexed memoranda comprising agreements between and signed by both Parties.

“Local Currency” means the currency of Kenya.

“Materials” means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

“Notice of Dissatisfaction” means the notice given by either Party to the other under Sub-Clause 20.3 indicating its dissatisfaction and intention to commence arbitration.

“Special Conditions of Contract” means the pages completed by the Procuring Entity entitled Special Conditions of Contract which constitute Part A of the Special Conditions.

“Party” means the Procuring Entity or the Contractor, as the context requires.

“Payment Certificate” means a payment certificate issued under Clause 14 [Contract Price and Payment]. **“Performance Certificate”** means the certificate issued under Sub-Clause 11.9 [Performance Certificate]. **“Performance Security”** means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security]. **“Permanent Works”** means the permanent works to be executed by the Contractor under the Contract.

“Plant” means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Procuring Entity and relating to the construction or operation of the Works.

“Procuring Entity's Equipment” means the apparatus, machinery and vehicles (if any) made available by the

Procuring Entity for the use of the Contract or in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Procuring Entity.

“Procuring Entity's Personnel” means the Engineer, the Engineer, the assistants and all other staff, labor and other employees of the Architect and of the Procuring Entity; and any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as Procuring Entity's Personnel.

“Procuring Entity” means the Entity named in the Special Conditions of Contract.

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

“Engineer” means the person appointed by the Procuring Entity to act as the Architect for the purposes of the Contract and named in the Special Conditions of Contract, or other person appointed from time to time by the Procuring Entity and notified to the Contractor

“Provisional Sum” means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

“Retention Money” means the accumulated retention moneys which the Procuring Entity retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].

“Schedules” means the document(s) entitled schedules, completed by the Contractor and submitted with the Form of Tender, as included in the Contract.

“Section” means a part of the Works specified in the Special Conditions of Contract as a Section (if any)

“Site Investigation Reports” are those reports that may be included in the tendering documents which are actual and interpretative about the surface and sub-surface condition at the Site.

“Site” means the places where the Permanent Works are to be executed, including storage and working areas, and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

“Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.

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

“Statement” means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

“Subcontractor” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works.

“Taking-Over Certificate” means a certificate issued under Clause 10 [Procuring Entity's Taking Over].

“Temporary Works” means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

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

“Tender” means the Form of Tender and all other documents which the Contractor submitted with the Form of Tender, as included in the Contract.

“Tests after Completion” means the tests (if any) which are specified in the Contract and which are carried out in

accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Procuring Entity.

“Tests on Completion” means the tests which are specified in the Contractor agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Procuring Entity.

“Time for Completion” means the time for completing the Works or a Section (as the case may be) as stated in the Special Conditions of Contract (with any extension calculated from the Commencement Date.

“Unforeseeable” means not reasonably foreseeable by an experienced contractor by the Base Date.

“Variation” means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

“Works” means the items the Procuring Entity requires the Contractor to undertake as defined in the Appendix to Conditions of Contract. **“Works”** may also mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.2 Interpretation

In the Contract, except where the context requires otherwise:

- a) Words indicating one gender include all genders;
- b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- c) provisions including the word “agree”, “agreed” or “agreement” require the agreement to be recorded in writing;
- d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 Communications

1.3.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

- a) In writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Special Conditions of Contract; and
- b) delivered, sent or transmitted to the address of the recipient's communications as stated in the Special Conditions of Contract. However:
 - i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

1.3.2 Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Architect or the other Party, as the case may be.

1.4 Law and Language

1.4.1 The Contract shall be governed by the laws of **Kenya**.

1.4.2 The ruling language of the Contract shall be **English**.

1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) The Contract Agreement,
- b) The Letter of Acceptance,
- c) The Special Conditions – Part A,
- d) the Special Conditions – Part B
- e) the General Conditions of Contract
- f) the Form of Tender,
- g) the Specifications and Bills of Quantities
- h) the Drawings, and
- i) the Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Architect shall issue any necessary clarification or instruction.

1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 14 days after the Contractor receives the Contract Agreement, unless the Special Conditions establish otherwise. The Contract Agreement shall be based upon the form annexed to the Special Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Procuring Entity.

1.7 Assignment

The Contractor shall not assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, the contractor:

- a) May assign the whole or any part with the prior consent of the Procuring Entity, and
- b) may, as security in favor of a bank or financial institution, assign its right to moneys due, or to become due, under the Contract.

1.8 Care and Supply of Documents

- 1.8.1 The Specifications and Drawings shall be in the custody and care of the Procuring Entity. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawings and Bills of Quantities shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.
- 1.8.2 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Procuring Entity. Unless otherwise stated in the Contract, the Contractor shall supply to the Architect two copies of each of the Contractor's Documents.
- 1.8.3 The Contractor shall keep on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Procuring Entity's Personnel shall have the right of access to all these documents at all reasonable times.
- 1.8.4 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9 Timely provision of Drawings or Instructions

- 19.1 The Contractor shall give notice to the Architect whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

- 1.92 If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Architect to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any other associated costs accrued, which shall be included in the Contract Price.
- 1.93 After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 1.94 However, if and to the extent that the Architect failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, or costs accrued.

1.10 Procuring Entity's Use of Contractor's Documents

- 1.10.1 As agreed between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.
- 1.10.2 The Contractor shall be deemed (by signing the Contract) to give to the Procuring Entity a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:
- a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
 - b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
 - c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.
- 1.10.3 The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Procuring Entity for purposes other than those permitted under Sub-Clause 1.10.2.

1.11 Contractor's Use of Procuring Entity's Documents

As agreed between the Parties, the Procuring Entity shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Procuring Entity. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Procuring Entity's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.12 Confidential Details

- 1.12.1 The Contractor's and the Procuring Entity's Personnel shall ensure confidentiality at all times. The confidentiality shall survive termination or completion of the contract. They shall disclose all such confidential and other information as may be reasonably required in order to verify compliance with the Contract and allow its proper implementation.
- 1.12.2 The Contractor's and the Procuring Entity's Personnel shall also treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Special Conditions of Contract:

- a) The Procuring Entity shall have obtained (or shall obtain) the planning, zoning, building permit or similar permission for the Permanent Works, and any other permissions described in the Specifications as having been (or to be) obtained by the Procuring Entity; and the Procuring Entity shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licenses and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Procuring Entity harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

1.14 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

- a) These persons shall be deemed to be jointly and severally liable to the Procuring Entity for the performance of the Contract;
- b) these persons shall notify the Procuring Entity of their leader who shall have authority to bind the Contractor and each of these persons; and
- c) the Contractor shall not alter its composition or legal status without the prior consent of the Procuring Entity.

1.15 Inspections and Audit by the Procuring Entity

Pursuant to paragraph 2.2(e) of Appendix B to the General Conditions, the Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Public Procurement Regulatory Authority, Procuring Entity and/or persons appointed or designated by the Government of Kenya 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 Procuring Entity if requested by the Procuring Entity. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 15.6 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Procuring Entity's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Procuring Entity's prevailing sanctions procedures).

2 THE PROCURING ENTITY

2.1 Right of Access to the Site

2.1.1 The Procuring Entity shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the **Special Conditions of Contract**. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Procuring Entity is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Procuring Entity shall do so in the time and manner stated in the Specification. However, the Procuring Entity may withhold any such right or possession until the Performance Security has been received.

2.1.2 If no such time is stated in the Special Conditions of Contract, the Procuring Entity shall give the Contractor right of access to, and possession of, the Site within such times as required to enable the Contractor to proceed without disruption in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

- 213 If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Procuring Entity to give any such right or possession within such time, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.
- 214 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 215 However, if and to the extent that the Procuring Entity's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

22 Permits, Licenses or Approvals

- 221 The Procuring Entity shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:
- a) Copies of the Laws of Kenya which are relevant to the Contract but are not readily available, and
 - b) any permits, licenses or approvals required by the Laws of Kenya:
 - i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
 - ii) for the delivery of Goods, including clearance through customs, and
 - iii) for the export of Contractor's Equipment when it is removed from the Site.

23 Procuring Entity's Personnel

The Procuring Entity shall be responsible for ensuring that the Procuring Entity's Personnel and the Procuring Entity's other contractor son the Site:

- a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and
- b) take action ssimilar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].

24 Procuring Entity's Financial Arrangements

The Procuring Entity shall make and maintain all necessary financial arrangements which will enable the Procuring Entity to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment].

3 THE ENGINEER

3.1 Architect Duties and Authority

- 3.11 The Procuring Entity shall appoint the Architect who shall carry out the duties assigned to him in the Contract. The Architect staff shall include suitably qualified Assistants and other professionals who are competent to carry out these duties. The Architect Name and Address shall be provided in the **Special Conditions of Contract**.
- 3.12 The Architect shall have no authority to amend the Contract.
- 3.13 The Architect May exercise the authority attributable to the Architect as specified in or necessarily to be implied from the Contract. If the Architects required to obtain the approval of the Procuring Entity before exercising a specified authority, the requirements shall be as stated in the **Special Conditions of Contract**. The Procuring Entity shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

- 3.14 However, whenever the Architect exercises a specified authority for which the Procuring Entity's approval is required, then (for the purposes of the Contract) the contractor shall require the Architect to provide evidence of such approval before complying with the instruction.
- 3.15 Except as otherwise stated in these Conditions:
- a) Whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Architect shall be deemed to act for the Procuring Entity;
 - b) the Architect has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract;
 - c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Architect (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances; and
 - d) any act by the Architect in response to a Contractor's request shall be notified in writing to the Contractor within 14 days of receipt.
- 3.16 The following provisions shall apply:
- The Architect shall obtain the specific approval of the Procuring Entity before taking action under the following Sub-Clauses of these Conditions:
- a) Sub-Clause 4.12: agreeing or determining an extension of time and/or additional cost.
 - b) Sub-Clause 13.1: instructing a Variation, except;
 - i) In an emergency situation as determined by the Engineer, or
 - ii) If such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the **Special Conditions of Contract**.
 - c) Sub-Clause 13.3: Approving a proposal for Variation submitted by the Contractor in accordance with Sub-Clause 13.1 or 13.2.
 - d) Sub-Clause 13.4: Specifying the amount payable in each of the applicable three currencies.
- 3.17 Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Procuring Entity, with any such instruction of the Engineer. The Architect shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Procuring Entity.

32 Delegation by the Engineer

- 32.1 The Architect may from time to time assign duties and delegate authority to assistants and may also revoke such assignment or delegation. These assistants may include a resident Engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Architect shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

322 Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

- a) Any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Architect to reject the work, Plant or Materials;
- b) If the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

33 Instructions of the Engineer

33.1 The Architect may issue to the Contractor (at anytime) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under Clause 3.2.1.

33.2 The Contractor shall comply with the instructions given by the Architect or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Architect or a delegated assistant:

- a) Gives an oral instruction,
- b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
- c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

Then the confirmation shall constitute the written instruction of the Architect or delegated assistant (as the case may be).

34 Replacement of the Engineer

If the Procuring Entity intends to replace the Engineer, the Procuring Entity shall, in not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended person to replace the Engineer.

35 Determinations

35.1 Whenever these Conditions provide that the Architect shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Architect shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Architect shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

3.5.1 The Architect shall give notice to both Parties of each agreement or determination, with supporting particulars, within 30 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

4 THE CONTRACTOR

4.1 Contractor's General Obligations

4.1.1 The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Architect instructions, and shall remedy any defects in the Works.

4.1.2 The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.

- 4.13 All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country.
- 4.14 The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.
- 4.15 The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.
- 4.16 If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Special Conditions:
- a) The Contractor shall submit to the Architect the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
 - b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Architect to add to the Drawings for co-ordination of each Party's designs;
 - c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
 - d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Architect the "as-built" documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Procuring Entity to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

42 Performance Security

- 4.21 The Contractor shall obtain (at his cost) a Performance Security for proper performance, in the amount stated in the **Special Conditions of Contract** and denominated in the currency (ies) of the Contract or in a freely convertible currency acceptable to the Procuring Entity. If an amount is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.
- 4.22 The Contractor shall deliver the Performance Security to the Procuring Entity within 30 days after receiving the Notification of Award and shall send a copy to the Engineer. The Performance Security shall be issued by a reputable bank selected by the Contractor and shall be in the form annexed to the Special Conditions, as stipulated by the Procuring Entity in the Special Conditions of Contract, or in another form approved by the Procuring Entity.
- 4.23 The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.
- 4.24 The Procuring Entity shall not make a claim under the Performance Security, except for amounts to which the Procuring Entity is entitled under the Contract.
- 4.25 The Procuring Entity shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security to the extent to which the Procuring Entity was not entitled to make the claim.
- 4.26 The Procuring Entity shall return the Performance Security to the Contractor within 14 days after receiving a copy of the Taking-Over Certificate.

427 Without limitation to the provisions of the rest of this Sub-Clause, whenever the Architect determines an addition or a reduction to the Contract Price as a result of a change in cost and/ or legislation, or as a result of a Variation, amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Architect request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage.

43 Contractor's Representative

431 The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract. The Contractor's Representative's Name and Address shall be provided in the **Special Conditions of Contract**.

432 Unless the Contractor's Representative **is named in the Contract**, the Contractor shall, prior to the Commencement Date, submit to the Architect for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

433 The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint another person in its place.

434 The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Architect prior consent, and the Architect shall be notified accordingly.

435 The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

436 The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Architect has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

437 The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreter available during all working hours in a number deemed sufficient by the Engineer.

44 Sub-contractors

441 The Contractor shall not subcontract the whole of the Works. The contractor may, however, subcontract the works as provided in Clause 34.2.

442 The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Special Conditions:

- a) The Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract;
- b) The prior consent of the Procuring Entity shall be obtained to other proposed Subcontractors;
- c) the Contractor shall give the Procuring Entity not less than 14 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site; and
- d) each subcontract shall include provisions which would entitle the Procuring Entity to require the subcontract to be assigned to the Procuring Entity under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity].

443 The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidentiality] apply equally to each Subcontractor.

444 Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from Kenya to be appointed as Subcontractors.

45 Assignment of Benefit of Subcontract

If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Procuring Entity, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Procuring Entity for the work carried out by the Subcontractor after the assignment takes effect.

46 Co-operation

46.1 The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

- a) The Procuring Entity's Personnel,
- b) Any other contractors employed by the Procuring Entity, and
- c) The personnel of any legally constituted public authorities, who may be employed in the execution on or near the Site of any work not included in the Contract.

46.2 Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to suffer delays and/or incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

46.3 If, under the Contract, the Procuring Entity is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Architect in the time and manner stated in the Specification.

47 Setting Out of the Works

47.1 The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

47.2 The Procuring Entity shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

4.7.3 If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) payment of any such costs accrued, which shall be included in the Contract Price.

4.7.4 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to these.

48 Safety Procedures

The Contractor shall:

- a) Comply with all applicable safety regulations,
- b) Take care for the safety of all persons entitled to be on the Site,
- c) Use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,

- d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Procuring Entity's Taking Over], and
- e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

49 Quality Assurance

- 4.9.1 The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Architect shall be entitled to audit any aspect of the system.
- 4.9.2 Details of all procedures and compliance documents shall be submitted to the Architect or information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor itself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

410 Site Data

- 4.10.1 The Procuring Entity shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Procuring Entity's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Procuring Entity shall similarly make available to the Contractor all such data which come into the Procuring Entity's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.
- 4.10.2 To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):
 - a) The form and nature of the Site, including sub-surface conditions,
 - b) the hydrological and climatic conditions,
 - c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
 - d) the Laws, procedures and labour practices of Kenya, and
 - e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

411 Sufficiency of the Accepted Contract Amount

- 4.11.1 The Contractor shall be deemed to:
 - a) Have satisfied itself as to the correctness and sufficiency of the Accepted Contract Amount, and
 - b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].
- 4.11.2 Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects.

4.12 Unforeseeable Physical Conditions

- 4.12.1 In this Sub-Clause, “physical conditions” means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.
- 4.12.2 If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Architect as soon as practicable.
- 4.12.3 This notice shall describe the physical conditions, so that they can be inspected by the Architect and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Architect may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.
- 4.12.4 If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to notice under Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost, which shall be included in the Contract Price.
- 4.12.5 Upon receiving such notice and inspecting and/or investigating these physical conditions, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.
- 4.12.6 However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Architect may also review whether other physical conditions in similar parts of the Works (if any) were more favorable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favorable conditions were encountered, the Architect may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.
- 4.12.7 The Architect shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of any such evidence.

4.13 Rights of Way and Facilities

Unless otherwise specified in the Contract the Procuring Entity shall provide effective access to and possession of the Site including special and/or temporary rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities outside the Site which he may require for the purposes of the Works.

4.14 Avoidance of Interference

- 4.14.1 The Contractor shall not interfere unnecessarily or improperly with:
- a) The convenience of the public, or
 - b) The access to and use and occupation of all roads and foot paths, irrespective of whether they are public or in the possession of the Procuring Entity or of others.

- 4.14.2 The Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.15 Access Route

- 4.15.1 The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site at Base Date. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.
- 4.15.2 Except as otherwise stated in these Conditions:
- a) The Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
 - b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
 - c) the Procuring Entity shall not be responsible for any claims which may arise from the use or otherwise of any access route;
 - d) the Procuring Entity does not guarantee the suitability or availability of particular access routes; and
 - e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.16 Transport of Goods

Unless otherwise stated in the Special Conditions:

- a) the Contractor shall give the Architect not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- c) the Contractor shall indemnify and hold the Procuring Entity harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods and shall negotiate and pay all claims arising from their transport.

4.17 Contractor's Equipment

The Contractor shall be responsible for all Contractor's Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

4.18 Protection of the Environment

- 4.18.1 The contractor shall comply with the applicable environmental laws, regulations and policies.
- 4.18.2 The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.
- 4.18.3 The Contractors shall ensure that emissions, surface charges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

4.19 Electricity, Water and Gas

- 4.19.1 The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Specifications, for the tests.

- 4.192 The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specifications. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.
- 4.193 The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Architect in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.

420 Procuring Entity's Equipment and Free-Issue Materials

- 4.20.1 The Procuring Entity shall make the Procuring Entity's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification:
- a) The Procuring Entity shall be responsible for the Procuring Entity's Equipment, except that
 - b) the Contractor shall be responsible for each item of Procuring Entity's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.
- 4.20.1 The appropriate quantities and the amounts due (at such stated prices) for the use of Procuring Entity's Equipment shall be agreed or determined by the Architect in accordance with Sub-Clause 2.5 [Procuring Entity's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Procuring Entity.
- 4.20.2 The Procuring Entity shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Specification. The Procuring Entity shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them and shall promptly give notice to the Architect of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Procuring Entity shall immediately rectify the notified shortage, defect or default.
- 4.20.3 After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Procuring Entity of liability for any shortage, defect or default not apparent from a visual inspection.

421 Progress Reports

- 4.21.1 Unless otherwise stated in the Special Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Architect in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.
- 4.21.2 Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works. Each report shall include:
- a) charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
 - b) photographs showing the status of manufacture and of progress on the Site;
 - c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - i) commencement of manufacture,
 - ii) Contractor's inspections,
 - iii) tests, and
 - iv) shipment and arrival at the Site;
 - d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
 - e) copies of quality assurance documents, test results and certificates of Materials;

- f) list of notices given under Sub-Clause 2.5 [Procuring Entity's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- h) comparison so factual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

422 Security of the Site

Unless otherwise stated in the Special Conditions:

- a) The Contractor shall be responsible for keeping unauthorized persons off the Site, and
- b) authorized persons shall be limited to the Contractor's Personnel and the Procuring Entity's Personnel; and to any other personnel notified to the Contractor, by the Procuring Entity or the Engineer, as authorized personnel of the Procuring Entity's other contractors on the Site.

423 Contractor's Operations on Site

423.1 The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Architect as additional working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacentl and.

423.2 During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

423.3 Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that partof the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site andthe Works in a clean and safe condition. However, the Contractor may retain on Site, during the DefectsNotification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

424 Fossils

424.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Procuring Entity. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

424.2 The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying withthe instructions, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4[Extension of Time for Completion], and
- b) payment of any such Cost, which shall be included in the Contract Price.
After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

5 NOMINATED SUBCONTRACTORS

5.1 Definition of “nominated Subcontractor”

In this Contract, “nominated Subcontractor” means a Subcontractor:

- a) Who is nominated by the Procuring Entity, or
- b) Contractor has nominated as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].

52 Objection to Nomination

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Procuring Entity as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Procuring Entity agrees in writing to indemnify the Contractor against and from the consequences of the matter:

- a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;
- b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or
- c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:
 - i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract;
 - ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities, and
 - iii) be paid only if and when the Contractor has received from the Procuring Entity payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].

53 Payments to nominated Subcontractors.

The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor's invoices approved by the Contractor which the Architect certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

54 Evidence of Payments

54.1 Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Architect may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- (a) Submits this reasonable evidence to the Engineer, or
- (b)
 - i) Satisfies the Architect in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
 - ii) Submits to the Architect reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement, then the Procuring Entity may (at his sole discretion) pay, directly to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Procuring Entity, the amount which the nominated Subcontractor was directly paid by the Procuring Entity.

6 STAFF AND LABOR

6.1 Engagement of Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, feeding, transport, and, when appropriate, housing. The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within Kenya.

62 Rates of Wages and Conditions of Labor

62.1 The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by Procuring Entity's whose trade or industry is similar to that of the Contractor.

62.2 The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in Kenya in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of Kenya for the time being in force, and the Contractor shall perform such duties in regard to such deductions there of as may be imposed on him by such Laws.

63 Persons in the Service of Procuring Entity

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Procuring Entity's Personnel.

64 Lab or Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, employment of children, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

65 Working Hours

No work shall be carried out on the Site on locally recognized days of rest, or outside the normal working hours stated in the **Special Conditions of Contract**, unless:

- a) Otherwise stated in the Contract,
- b) The Architect gives consent, or
- c) The work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer, provided that work done outside the normal working hours shall be considered and paid for as overtime.

66 Facilities for Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities on site for the Contractor's Personnel. The Contractor shall also provide facilities for the Procuring Entity's Personnel as stated in the Specifications. The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

67 Health and Safety

67.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Procuring Entity's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

67.2 The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide what ever is required by this person to exercise this responsibility and authority.

673 The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Architect may reasonably require.

674 The Contractor shall conduct an awareness programme on HIV and other sexually transmitted diseases via an approved service provider and shall undertake such other measures taken to reduce the risk of the transfer of these diseases between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

68 Contractor's Superintendence

68.1 Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

68.2 Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

69 Contractor's Personnel

69.1 The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Contractor's Key personnel shall be named in the Special Conditions of Contract. The Architect may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- a) Persists in any misconduct or lack of care,
- b) Carries out duties in competently or negligently,
- c) fails to conform with any provisions of the Contract,
- d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment, or
- e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Works.

69.2 If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

610 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

611 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

612 Foreign Personnel

612.1 The Contractor shall not employ foreign personnel unless the contractor demonstrates that there are no Kenyans with the required skills.

612.2 The Contractor shall be responsible for the return of any foreign personnel to the place where they were recruited or to their domicile. In the event of the death in Kenya of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

613 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

614 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

615 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of Kenya, onsite, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal thereof by Contractor's Personnel.

616 Prohibition of Forced or Compulsory Labour

The Contractor shall not employ forced labor, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labor, such as indentured labor, bonded labor or similar labor-contracting arrangements.

617 Prohibition of Harmful Child Labor

The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where the relevant labour laws of Kenya have provisions for employment of minors, the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work.

618 Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

619 Workers' Organizations

The Contractor shall comply with the relevant labor laws that recognize workers' rights to form and to join workers' organizations of their choosing without interference.

620 Non-Discrimination and Equal Opportunity

The Contractor shall base the labour employment on the principle of equal opportunity and fair treatment and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline.

7. PLANT, MATERIALS AND WORKMANSHIP

7.1 Manner of Execution

The Contractor shall carry out the manufacture/assemble of plant, the production and manufacture of Materials, and all other execution of the Works:

- a) In the manner (if any) specified in the Contract,
- b) in a proper workman like and careful manner, in accordance with recognized good practice, and

- c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

72 Samples

The Contractor shall submit the following samples of Materials, and relevant information, to the Architect for consent prior to using the Materials or for the Works:

- a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
- b) additional samples instructed by the Architect as a Variation.

Each sample shall be labeled as to origin and intended use in the Works.

73 Inspection

73.1 The Procuring Entity's Personnel shall at all reasonable times:

- a) Have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

732 The Contractor shall give the Procuring Entity's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

733 The Contractor shall give notice to the Architect whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Architect shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Architect does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and there after reinstate and make good, all at the Contractor's cost.

74 Testing

74.1 This Sub-Clause shall apply to all tests specified in the Contract.

742 Except as otherwise specified in the Contract, the Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

743 The Architect may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

744 The Architect shall give the Contractor not less than 24 hours' notice of the Architect's intention to attend the tests. If the Architect does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Architect's presence.

745 If the Contractor suffers delay and/ or incurs Cost from complying with these instructions or as a result of a delay for which the Procuring Entity is responsible, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

746 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

747 The Contractor shall promptly forward to the Architect duly certified reports of the tests. When the specified tests have been passed, the Architect shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Architect has not attended the tests, he shall be deemed to have accepted the readings as accurate.

75 Rejection

75.1 If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Architect may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

75.2 If the Architect requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Procuring Entity to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity.

76 Remedial Work

76.1 Notwithstanding any previous test or certification, the Architect may instruct the Contractor to:

- a) Remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
- b) remove and re-execute any other work which is not in accordance with the Contract, and
- c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseen able event or otherwise.

76.2 The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

76.3 If the Contractor fails to comply with the instruction, the Procuring Entity shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity all costs arising from this failure.

76.4 If the contractor repeatedly delivers defective work, the Procuring Entity may consider termination in accordance with Clause 15.

77 Ownership of Plant and Materials

Except as otherwise provided in the Contract, each item of Plant and Materials shall become the property of the Procuring Entity at whichever is the earlier of the following times, free from liens and other encumbrances:

- a) When it is incorporated in the Works;
- b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

78 Royalties

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

- a) Natural materials obtained from outside the Site, and
- b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal are as within the Site are specified in the Contract.

8 COMMENCEMENT, DELAYS AND SUSPENSION

81 Commencement of Works

- 81.1 Except as otherwise specified in the Special Conditions of Contract, the Commencement Date shall be the date at which the following precedent condition have all been fulfilled and the Architect notification recording the agreement of both Parties on such fulfilment and instructing to commence the Work is received by the Contractor:
- a) Signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities of Kenya;
 - b) except if otherwise specified in the Special Conditions of Contract, effective access to and possession of the Site given to the Contractor together with such permission(s) under (a) of Sub-Clause 1.13 [Compliance with Laws] as required for the commencement of the Works.
 - c) Receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.
- 81.2 If the said Architect instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 16.2 [Termination by Contractor].
- 81.3 The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date and shall then proceed with the Works with due expedition and without delay.

82 Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

- a) Achieving the passing of the Test on Completion, and
- b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

83 Programme

- 83.1 The Contractor shall submit a detailed time programme to the Architect within 14 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:
- a) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
 - b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
 - c) the sequence and timing of inspections and tests specified in the Contract, and
 - d) a supporting report which includes:
 - i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
 - ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

- 832 Unless the Engineer, within 14 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Procuring Entity's Personnel shall be entitled to rely upon the programme when planning their activities.
- 833 The Contractor shall promptly give notice to the Architect of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works.
- 834 If, at anytime, the Architect gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contractor to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Architect in accordance with this Sub-Clause.

84 Extension of Time for Completion

- 84.1 The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:
- a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,
 - b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
 - c) exceptionally adverse climatic conditions,
 - d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
 - e) any delay, impediment or prevention caused by or attributable to the Procuring Entity, the Procuring Entity's Personnel, or the Procuring Entity's other contractors.
- 84.2 If the Contractor considers itself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Architect in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Architect shall review previous determinations and may increase, but shall not decrease, the total extension of time.

85 Delays Caused by Authorities

If the following conditions apply, namely:

- a) The Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in Kenya,
- b) These authorities delay or disrupt the Contractor's work, and
- c) the delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

86 Rate of Progress

- 86.1 If, at anytime:
- a) Actual progress is too slow to complete within the Time for Completion, and/or
 - b) Progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme], other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Architect may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

862 Unless the Architect notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Procuring Entity to incur additional costs, the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay these costs to the Procuring Entity, in addition to delay damages (if any) under Sub-Clause 8.7 below.

863 Additional costs of revised methods including acceleration measures, instructed by the Architect to reduce delays resulting from causes listed under Sub-Clause 8.4 [Extension of Time for Completion] shall be paid by the Procuring Entity, without generating, however, any other additional payment benefit to the Contractor.

87 Delay Damages

871 If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Procuring Entity's Claims] pay delay damages to the Procuring Entity for this default. These delay damages shall be the sum stated in the **Special Conditions of Contract**, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Special Conditions of Contract.

872 These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Procuring Entity] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

88 Suspension of Work

881 The Architect may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

882 The Architect may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

89 Consequences of Suspension

891 If the Contractor suffers delay and/or incurs Cost from complying with the Architect instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- b) Payment of any such Cost, which shall be included in the Contract Price.

892 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

893 The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

810 Payment for Plant and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/or Materials which have not been delivered to Site, if:

- a) The work on Plant or delivery of Plant and/or Materials has been suspended for more than 30 days, and
- b) the Contractor has marked the Plant and/or Materials as the Procuring Entity's property in accordance with the Architect instructions.

811 Prolonged Suspension

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Architect permission to proceed. If the Architect does not give permission within 30 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

812 Resumption of Work

After the permission or instruction to proceed is given, the Contractor and the Architect shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Architect an instruction to this effect under Clause 13 [Variations and Adjustments].

9 TESTS ON COMPLETION

91 Contractor's Obligations

- 91.1 The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].
- 91.2 The Contractor shall give to the Architect not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Architect shall instruct.
- 91.3 In considering the results of the Tests on Completion, the Architect shall make allowances for the effect of any use of the Works by the Procuring Entity on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Engineer.

92 Delayed Tests

- 92.1 If the Tests on Completion are being unduly delayed by the Procuring Entity, Sub-Clause 7.4 [Testing] (fifth paragraph) and/ or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.
- 92.2 If the Tests on Completion are being unduly delayed by the Contractor, the Architect may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Engineer.
- 92.3 If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Procuring Entity's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

93 Testing related work

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Architect or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

94 Failure to Pass Tests on Completion

- 94.1 If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Architect shall be entitled to:
- a) Order further repetition of Tests on Completion under Sub-Clause 9.3; or
 - b) if the failure deprives the Procuring Entity of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Procuring Entity shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 1.4 [Failure to Remedy Defects].

10. PROCURING ENTITY'S TAKING OVER

10.1 Taking Over of the Works and Sections

- 10.1.1 Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Procuring Entity when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.
- 10.1.2 The Contractor may apply by notice to the Architect for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.
- 10.1.3 The Architect shall, within 30 days after receiving the Contractor's application:
- a) Issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
 - b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.
- 10.1.4 If the Architect fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 30 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

- 10.2.1 The Architect may, at the sole discretion of the Procuring Entity, issue a Taking-Over Certificate for any part of the Permanent Works.
- 10.2.2 The Procuring Entity shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Architect has issued a Taking-Over Certificate for this part. However, if the Procuring Entity does use any part of the Works before the Taking-Over Certificate is issued:
- a) The part which is used shall be deemed to have been taken over as from the date on which it is used,
 - b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Procuring Entity, and
 - c) if requested by the Contractor, the Architect shall issue a Taking-Over Certificate for this part.
- 10.2.3 After the Architect has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.
- 10.2.4 If the Contractor incurs Cost as a result of the Procuring Entity taking over and/or using a part of the Works, other than such use as is specified in the Contract, the Contractor shall (i) give notice to the Architect and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such accrued costs, which shall be included in the Contract Price. After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this accrued cost.

- 1025 If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages there after for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages] and shall not affect the maximum amount of these damages.

103 Interference with Tests on Completion

- 103.1 If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Procuring Entity is responsible, the Procuring Entity shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.
- 1032 The Architect shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Architect shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.
- 1033 If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such accrued costs, which shall be included in the Contract Price.
- 1034 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

104 Surfaces Requiring Reinstatement

Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11. DEFECTS LIABILITY

11.1 Completion of Outstanding Work and Remedying Defects

- 11.1.1 In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fairwear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:
- a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and
 - b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Procuring Entity on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).
- 11.1.2 If a defect appears or damage occurs, the Contractor shall be notified accordingly by the Engineer.

112 Cost of Remedying Defects

- 112.1 All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:
- a) Any design for which the Contractor is responsible,
 - b) Plant, Materials or workmanship not being in accordance with the Contract, or
 - c) Failure by the Contractor to comply with any other obligation.
- 112.2 If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Procuring Entity, and Sub-Clause 13.3 [Variation Procedure] shall apply.

113 Extension of Defects Notification Period

- 113.1 The Procuring Entity shall be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or by reason of damage attributable to the Contractor. However, a Defects Notification Period shall not be extended by more than two years.
- 113.2 If delivery and/ or erection of Plant and/ or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defect or damage occurring more than two years after the Defects Notification Period for the Plant and/ or Materials would otherwise have expired.

114 Failure to Remedy Defects

- 114.1 If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by the Engineer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.
- 114.2 If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Procuring Entity may (at his option):
- (a) Carry out the work itself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Procuring Entity's Claims] pay to the Procuring Entity the costs reasonably incurred by the Procuring Entity in remedying the defect or damage;
 - (b) Require the Architect to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or
 - (c) if the defect or damage deprives the Procuring Entity of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contract otherwise, the Procuring Entity shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

115 Removal of Defective Work

If the defect or damage cannot be remedied expeditiously on the Site and the Procuring Entity gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

116 Further Tests

- 116.1 If the work of remedying of any defect or damage may affect the performance of the Works, the Architect may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 14 days after the defect or damage is remedied.

- 11.6.2 These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.
- 11.7 Right of Access**
- Until the Completion Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Procuring Entity's reasonable security restrictions.
- 11.8 Contractor to Search**
- The Contractor shall, if required by the Engineer, search for the cause of any defect on parts of the works that have already accepted, under the direction of the Engineer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search plus profit shall be agreed or determined by the Architect in accordance with Sub-Clause 3.5 [Determinations] and shall be included in the Contract Price.
- 11.9 Completion Certificate**
- 11.9.1 Performance of the Contractor's obligations shall not be considered to have been completed until the Architect has issued the Completion Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.
- 11.9.2 The Architect shall issue the Completion Certificate within 30 days after the latest of the expiry dates of the Defects Liability Period, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Completion Certificate shall be issued to the Procuring Entity.
- 11.9.3 Only the Completion Certificate shall be deemed to constitute acceptance of the Works.
- 11.10 Unfulfilled Obligations**
- After the Completion Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.
- 11.11 Clearance of Site**
- 11.11.1 Upon receiving the Completion Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.
- 11.11.2 If all these items have not been removed within 30 days after receipt by the Contractor of the Completion Certificate, the Procuring Entity may sell or otherwise dispose of any remaining items. The Procuring Entity shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.
- 11.11.3 Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Procuring Entity's costs, the Contractor shall pay the outstanding balance to the Procuring Entity.

12 MEASUREMENT AND EVALUATION

121 Works to be Measured

- 121.1 The Works shall be measured, and valued for payment, in accordance with this Clause. The Contractor shall show in each application under Sub-Clauses 14.3 [Application for Interim Payment Certificates], 14.10 [Statement on Completion] and 14.11 [Application for Final Payment Certificate] the quantities and other particulars detailing the amounts which he considers to be entitled under the Contract.

- 1212 Whenever the Architect requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:
- promptly either attend or send another qualified representative to assist the Architect in making the measurement, and
 - supply any particulars requested by the Engineer.
- 1213 If the Contractor fails to attend or send a representative, the measurement made by the Architect shall be accepted as accurate.
- 1214 Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Engineer. The Contractor shall, as and when requested, attend to examine and agree the records with the Engineer, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.
- 1215 If the Contractor examines and disagrees the records, and/ or does not sign them as agreed, then the Contractor shall give notice to the Architect of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Architect shall review the records and either confirm or vary them and certify the payment of the undisputed part. If the Contractor does not so give notice to the Architect within 14 days after being requested to examine the records, they shall be accepted as accurate.
- 122 Method of Measurement**
- Except as otherwise stated in the Contract:
- Measurement shall be made of the net actual quantity of each item of the Permanent Works, and
 - the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.
- 123 Evaluation**
- 123.1 Except as otherwise stated in the Contract, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of work one by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or price for the item.
- 1232 For each item of work, the appropriate rate or price for the item shall be the rate or price specified by the Contractor for such item in the Contract or, if there is no such item, specified for similar work.
- 1233 Any item of work included in the Bill of Quantities for which no rate or price was specified by the contractor shall be considered as included in other rates and prices in the Bill of Quantities and will not be paid for separately.
- 1234 However, for a new item of work, a new rate or price shall be appropriate for such item of work if:
- The work is instructed under Clause 13 [Variations and Adjustments],
 - no rate or price is specified in the Contract for this item, and
 - no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the Contract.
- 1235 Each new rate or price shall be derived from any relevant rates or prices in the Contract. If no rates or prices are relevant for the new item of work, it shall be derived from the reasonable Cost of executing such work, prevailing market rates, together with profit, taking account of any other relevant matters.
- 1236 Until such time as an appropriate rate or price is agreed or determined, the Architect shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned work commences.
- 1237 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: *(corrected tender price – tender price) / tender price X 100*.

124 Omissions

Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

- a) The Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;
- b) The omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- c) this cost is not deemed to be included in the evaluation of any substituted work; then the Contractor shall give notice to the Architect accordingly, with supporting particulars. Upon receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

13 VARIATIONS AND ADJUSTMENTS

13.1 Right to Vary

13.1.1 Variations may be initiated by the Architect at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal. No Variation instructed by the Architect under this Clause shall in any way vitiate or invalidate the Contract.

13.1.2 The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Architect stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Architect shall cancel, confirm or vary the instruction.

13.1.3 Each Variation may include:

- a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
- b) changes to the quality and other characteristics of any item of work,
- c) changes to the levels, positions and/ or dimensions of any part of the Works,
- d) omission of any work unless it is to be carried out by others,
- e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
- f) changes to the sequence or timing of the execution of the Works.

13.1.4 The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Architect instructs after obtaining approval of the Procuring Entity.

13.2 Variation Order Procedure

13.2.1 Prior to any Variation Order under Sub-Clause 13.1.4 the Architect shall notify the Contractor of the nature and form of such variation. As soon as possible after having received such notice, the Contractor shall submit to the Engineer:

- a) A description of work, if any, to be performed and a programme for its execution, and
- b) the Contractor's proposals for any necessary modifications to the Programme according to Sub-Clause 8.3 or to any of the Contractor's obligations under the Contract, and
- c) the Contractor's proposals for adjustment to the Contract Price.

Following the receipt of the Contractor's submission the Architect shall, after due consultation with the Employer and the Contractor, decide as soon as possible whether or not the variation shall be carried out. If the Architect decides that the variation shall be carried out, he shall issue a Variation Order clearly identified as such in accordance with the Contractor's submission or as modified by agreement.

If the Architect and the Contractor are unable to agree the adjustment of the Contract Price, the provisions of Sub-Clause 13.2.2 shall apply.

1322 Disagreement on Adjustment of the Contract Price

If the Contractor and the Architect are unable to agree on the adjustment of the Contract Price, the adjustments shall be determined in accordance with the rates specified in the Bills of Quantities or Schedule of Daywork Prices. If the rates contained in the Bills of Quantities or Dayworks Prices are not directly applicable to the specific work in question, suitable rates shall be established by the Architect reflecting the level of pricing in the Dayworks Prices. Where rates are not contained in the said Prices, the amount shall be such as is in all the circumstances reasonable, reflecting a market price. Due account shall be taken of any over-or under- recovery of overheads by the Contractor in consequence of the variation. The Contractor shall also be entitled to be paid:

- a) The cost of any partial execution of the Work rendered useless by any such variation,
- b) The cost of making necessary alterations to Plant already manufactured or in the course of manufacture or of any work done that has to be altered in consequence of such a variation,
- c) any additional costs incurred by the Contractor by the disruption of the progress of the Works as detailed in the Programme, and
- d) the net effect of the Contractor's financial costs, including interest, caused by the variation.

The Architect shall on this basis determine the rates or prices to enable on-account payment to be included in certificates of payment.

1323 Contractor to Proceed

On receipt of a Variation Order, the Contractor shall forthwith proceed to carry out the variation and be bound to these Conditions in so doing as if such variation was stated in the Contract. The work shall not be delayed pending the granting of an extension of the Time for Completion or an adjustment to the Contract Price under Sub-Clause 13.3.

133 Value Engineering

- 13.3.1 The Contractor may, at any time, submit to the Architect written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Procuring Entity of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Procuring Entity of the completed Works, or (i) otherwise be of benefit to the Procuring Entity.

- 13.3.2 The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].

- 13.3.3 If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:
- a) The Contractor shall design this part,
 - b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and
 - c) if this change results in a reduction in the contract value of this part, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall be half (50%) of the difference between the following amounts:
 - i) such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.8 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost], and
 - ii) the reduction (if any) in the value to the Procuring Entity of the varied works, taking account of any improvement in quality, anticipated life or operational efficiencies.

- 13.3.3 However, if the amount established in item 13.2.3 (c) (i) is less than amount established in item 13.2.3 (c) (ii), there shall not be a fee. However, if the amount established in item 13.2.3 (c) (i) is more than amount established in item 13.2.3 (c) (ii), it shall result in a price variation to the Procuring Entity.

13.4 Variation Procedure for Value Engineering proposal

- 13.4.1 If the Architect requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:
- a) A description of the proposed work to be performed and a programme for its execution,
 - b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and
 - c) the Contractor's proposal for evaluation of the Variation.
- 13.4.2 The Architect shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Project Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.
- 13.4.3 Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Architect to the Contractor, who shall acknowledge receipt.
- 13.4.4 Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Architect instructs or approves otherwise in accordance with this Clause.

13.5 Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

13.6 Provisional Sums

- 13.6.1 Each Provisional Sum shall only be used, in whole or in part, in accordance with the Architect instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Architect shall have instructed. For each Provisional Sum, the Architect may instruct:
- a) Work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or
 - b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which there shall be included in the Contract Price:
 - i) The actual amounts paid (or due to be paid) by the Contractor, and
 - ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in **the Special Conditions of Contract** shall be applied.

- 13.6.2 The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.7 Dayworks

- 13.7.1 For work of a minor or incidental nature, the Architect may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply.
- 13.7.2 Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

- 13.7.3 Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Architect accurate statements induplicate which shall include the following details of the resources used in executing the previous day's work:
- a) The names, occupations and time of Contractor's Personnel,
 - b) the identification, type and time of Contractor's Equipment and Temporary Works, and
 - c) the quantities and types of Plant and Materials used.
- 13.7.4 One copy of each statement will, if correct, or when agreed, be signed by the Architect and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

13.8 Adjustments for Changes in Legislation

- 13.8.1 The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of Kenya (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.
- 13.8.2 If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost, which shall be included in the Contract Price.
- 13.8.3 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
- 13.8.4 Notwithstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8 [Adjustments for Changes in Cost].

13.9 Adjustments for Changes in Cost

- 13.9.1 In this Sub-Clause, "table of adjustment data" means the completed table of adjustment data for local and foreign currencies included in the Schedules. If there is no such table of adjustment data, this Sub-Clause shall not apply.
- 13.9.2 If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labor, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included a mounts to cover the contingency of other rises and falls in costs.
- 13.9.3 The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be of the following general type:

Price Adjustment Formula

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:

$$P = A + B I_m/I_o$$

where:

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

A and **B** are recoefficients **specified in the SCC**, representing then on 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.

NOTE: The sum of the two coefficients A and B should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the non adjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency are added to

- 139.4 The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Engineer. For this purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.
- 139.5 Incases where the “currency of index” is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the Central Bank of Kenya, of this relevant currency on the above date for which the index is required to be applicable.
- 139.6 Until such time as each current cost index is available, the Architect shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.
- 139.7 If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices there after shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price, whichever is more favorable to the Procuring Entity.
- 139.8 The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or in applicable, as a result of Variations.

14 CONTRACT PRICE AND PAYMENT

14.1 The Contract Price

- 14.1.1 Unless otherwise stated in the Special Conditions:
- The value of the payment certificate shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;
 - the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];

- c) The quantities set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
 - i) of the Works which the Contractor is required to execute, or
 - ii) for the purposes of Clause 12 [Measurement and Evaluation]; and
- d) The Contractor shall submit to the Engineer, within 30 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules. The Architect may consider the proposed breakdown when preparing Payment Certificates but shall not be bound by it.

14.12 Notwithstanding the provisions of subparagraph (b), Contractor's Equipment, including essential spare parts therefor, imported by the Contractor for the sole purpose of executing the Contract shall not be exempt from the payment of import duties and taxes upon importation.

14.2 Advance Payment

14.2.1 The Procuring Entity shall make an advance payment, as an interest-free loan for mobilization and cash flow support, when the Contractor submits a guarantee in accordance with this Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the **Special Conditions of Contract**.

14.2.2 Unless and until the Procuring Entity receives this guarantee, or if the total advance payment is not stated in the Special Conditions of Contract, this Sub-Clause shall not apply.

14.2.3 The Architect shall deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate for the advance payment or its first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Procuring Entity receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by a reputable bank or financial institutions elected by the Contractor and shall be in the form annexed to the Special Conditions or in another form approved by the Procuring Entity.

14.2.4 The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount shall be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 30 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

14.2.5 Unless stated otherwise in the **Special Conditions of Contract**, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Architect in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:

- a) Deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 percent (30%) of the Accepted Contract Amount less Provisional Sums; and
- b) deductions shall be made at the amortization rate stated in the **Special Conditions of Contract** of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 percent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.

14.2.6 If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Procuring Entity], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Procuring Entity], except for Sub-Clause 14.2.7 [Procuring Entity's Entitlement to Termination for Convenience], payable by the Contractor to the Procuring Entity.

143 Application for Interim Payment Certificates

- 143.1 The Contractor shall submit a Statement (in number of copies indicated in the **Special Conditions of Contract**) to the Architect after the end of each month, in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers itself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with Sub-Clause 4.21 [Progress Reports].
- 143.2 The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:
- a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);
 - b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];
 - c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the **Special Conditions of Contract** to the total of the above amounts, until the amount so retained by the Procuring Entity reaches the limit of Retention Money (if any) stated in the **Special Conditions of Contract**;
 - d) any amounts to be added for the advance payment and (if more than one instalment) and to be deducted for its repayments in accordance with Sub-Clause 14.2 [Advance Payment];
 - e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];
 - f) any other additions or deductions which may have become due under the Contractor otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and
 - g) the deduction of amounts certified in all previous Payment Certificates.

144 Schedule of Payments

- 144.1 If the Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:
- a) The instalments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];
 - b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and
 - c) If these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less or more than that on which this schedule of payments was based, then the Architect may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less or more than that on which the instalments were previously based.
- 144.2 If the Contract does not include a schedule of payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

145 Plant and Materials intended for the Works

- 145.1 If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].
- 145.2 If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Schedules, this Sub-Clause shall not apply.

- 1453 The Architect shall determine and certify each addition if the following conditions are satisfied:
- a) The Contractor has:
 - i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
 - ii) submitted statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence;
 and either:
 - b) the relevant Plant and Materials:
 - i) are those listed in the Schedules for payment when shipped,
 - ii) have been shipped to Kenya, enroute to the Site, in accordance with the Contract; and
 - iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Architect together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Procuring Entity in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration; or
 - c) the relevant Plant and Materials:
 - i) are those listed in the Schedules for payment when delivered to the Site, and
 - ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration and appear to be in accordance with the Contract.
- 1454 The additional amount to be certified shall be the equivalent of eighty percent (80%) of the Architect determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.
- 1455 The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.
- 146 Issue of Interim Payment Certificates**
- 146.1 No amount will be certified or paid until the Procuring Entity has received and approved the Performance Security. Thereafter, the Architect shall, within 30 days after receiving a Statement and supporting documents, deliver to the Procuring Entity and to the Contractor an Interim Payment Certificate which shall state the amount which the Architect fairly determines to be due, with all supporting particulars for any reduction or withholding made by the Architect on the Statement if any.
- 146.2 However, prior to issuing the Taking-Over Certificate for the Works, the Architect shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated **in the Special Conditions of Contract**. In this event, the Architect shall give notice to the Contractor accordingly.
- 146.3 An Interim Payment Certificate shall not be withheld for any other reason, although:
- a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
 - b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.
- 4.6.4 The Architect may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Architect's acceptance, approval, consent or satisfaction.

147 Payment

14.7.1 The Procuring Entity shall pay to the Contractor:

- a) The advance payment shall be paid within 60 days after signing of the contract by both parties or within 60 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and Sub-Clause 14.2 [Advance Payment], whichever is later;
- b) The amount certified in each Interim Payment Certificate within 60 days after the Architect Issues Interim Payment Certificate; and
- c) the amount certified in the Final Payment Certificate within 60 days after the Procuring Entity Issues Interim Payment Certificate; or after determination of any disputed amount shown in the Final Statement in accordance with Sub-Clause 16.2 [Termination by Contractor].

14.7.2 Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (or the currency) specified in the Contract.

148 Delayed Payment

14.8.1 If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges (simple interest) monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.

14.8.2 These financing charges shall be calculated at the annual rate of three percentage points above the mean rate of the Central Bank in Kenya of the currency of payment, or if not available, the inter bank offered rate, and shall be paid in such currency.

14.8.3 The Contractor shall be entitled to this payment without formal notice and certification, and without prejudice to any other right or remedy.

149 Payment of Retention Money

14.9.1 When the Taking-Over Certificate has been issued for the Works, the first half of the Retention Money shall be certified by the Architect for payment to the Contractor. If a Taking-Over Certificate is issued for a Section or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.

14.9.2 Promptly after the latest of the expiry dates of the Defects Liability Periods, the outstanding balance of the Retention Money shall be certified by the Architect for payment to the Contractor. If a Taking-Over Certificate was issued for a Section, a proportion of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.

14.9.3 However, if any work remains to be executed under Clause 11 [Defects Liability], the Architect shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

14.9.4 When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost].

14.9.5 Unless otherwise stated in the Special Conditions, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a Retention Money Security guarantee, in the form annexed to the Special Conditions or in another form approved by the Procuring Entity and issued by a reputable bank or financial institution selected by the Contractor, for the second half of the Retention Money.

- 14.9.6 The Procuring Entity shall return the Retention Money Security guarantee to the Contractor within 14 days after receiving a copy of the Completion Certificate.

14.10 Statement at Completion

- 14.10.1 Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Architect three copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates], showing:
- a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
 - b) any further sums which the Contractor considers to be due, and
 - c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

- 14.10.2 The Architect shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

14.11 Application for Final Payment Certificate

- 14.11.1 Within 60 days after receiving the Completion Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a form approved by the Engineer:
- a) The value of all work done in accordance with the Contract, and
 - b) Any further sums which the Contractor considers to be due to him under the Contract otherwise.

- 14.11.2 If the Architect disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Architect may reasonably require within 30 days from receipt of said draft and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Architect the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

- 14.11.3 However, if, following discussions between the Architect and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Architect shall deliver to the Procuring Entity (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Procuring Entity (with a copy to the Engineer) a Final Statement.

14.12 Discharge

When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.

14.13 Issue of Final Payment Certificate

- 14.13.1 Within 30 days after receiving the Final Statement and discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Architect shall deliver to the Procuring Entity and to the Contractor, the Final Payment Certificate which shall state:
- a) The amount which he fairly determines is finally due, and
 - b) After giving credit to the Procuring Entity for all amounts previously paid by the Procuring Entity and for all sums to which the Procuring Entity is entitled, the balance (if any) due from the Procuring Entity to the Contractor or from the Contractor to the Procuring Entity, as the case may be.

- 14.132 If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Architect shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 30 days, the Architect shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

14.14 Cessation of Procuring Entity's Liability

- 14.14.1 The Procuring Entity shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:
- a) in the Final Statement and also,
 - b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].
- 14.14.2 However, this Sub-Clause shall not limit the Procuring Entity's liability under his indemnification obligations, or the Procuring Entity's liability in any case of fraud, deliberate default or reckless misconduct by the Procuring Entity.

14.15 Currencies of Payment

The Contract Price shall be paid in the currency or currencies named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows:

- a) If the Accepted Contract Amount was expressed in Local Currency only:
 - i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties;
 - ii) payments and deductions under Sub-Clause 13.5 [Provisional Sums] and Sub-Clause 13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and proportions; and
 - iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a) (i) above;
- b) payment of the damages specified in the Special Conditions of Contract, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies;
- c) other payments to the Procuring Entity by the Contractor shall be made in the currency in which the sum was expended by the Procuring Entity, or in such currency as may be agreed by both Parties;
- d) if any amount payable by the Contractor to the Procuring Entity in a particular currency exceeds the sum payable by the Procuring Entity to the Contractor in that currency, the Procuring Entity may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
- e) if no rates of exchange are stated in the Schedule of Payment Currencies, they shall be those prevailing on the Base Date and determined by the Central Bank of Kenya.

15 TERMINATION BY PROCURING ENTITY

15.1 Notice to correct any defects or failures.

If the Contractor fails to carry out any obligation under the Contract, the Architect may by notice require the Contractor to make good the failure and to remedy it within 30 days.

15.2 Termination by Procuring Entity

- 15.2.1 The Procuring Entity shall be entitled to terminate the Contract if the Contractor breaches the contract based on following circumstances which shall include but not limited to:
- a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],

- b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- c) without reasonable excuse fails:
 - i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
 - ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 30 days after receiving it,
- d) subcontracts the major part or whole of the Works or assigns the Contract without the consent of the Procuring Entity,
- e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee, or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
- f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission, or other thing of value, as an induce or reward:
 - i) for doing or for bearing to do any action in relation to the Contract, or
 - ii) for showing or for bearing to show favor or disfavor to any person in relation to the Contract, or
 - iii) if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such induce or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination, or
- g) If the contract or repeatedly fails to remedy delivers defective work,
- h) based on reasonable evidence, has engaged in Fraud and Corruption as defined in paragraph 2.2 of the Appendix B to these General Conditions, in competing for or in executing the Contract.

1522 In any of these events or circumstances, the Procuring Entity may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f) or (g) or (h), the Procuring Entity may by notice terminate the Contract immediately.

1523 The Procuring Entity's election to terminate the Contract shall not prejudice any other rights of the Procuring Entity, under the Contract otherwise.

1524 The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

1525 After termination, the Procuring Entity may complete the Works and/ or arrange for any other entities to do so. The Procuring Entity and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.

1526 The Procuring Entity shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Procuring Entity, these items may be sold by the Procuring Entity in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

153 Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Procuring Entity] has taken effect, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract.

154 Payment after Termination

After a notice of termination under Sub-Clause 15.2 [Termination by Procuring Entity] has taken effect, the Procuring Entity may:

- a) Proceed in accordance with Sub-Clause 2.5 [Procuring Entity's Claims],
- b) withhold further payments to the Contractor until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Procuring Entity, have been established, and/ or
- c) recover from the Contractor any losses and damages incurred by the Procuring Entity and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination]. After recovering any such losses, damages and extra costs, the Procuring Entity shall pay any balance to the Contractor.

155 Procuring Entity's Entitlement to Termination for Convenience

The Procuring Entity shall be entitled to terminate the Contract, at any time at the Procuring Entity's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 30 days after the later of the dates on which the Contractor receives this notice or the Procuring Entity returns the Performance Security. The Procuring Entity shall not terminate the Contract under this Sub-Clause in order to execute the Works itself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor under Clause 16.2 [Termination by Contractor]. After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 16.4 [Payment on Termination].

156 Fraud and Corruption

The Contractor shall ensure compliance with the Kenya Government's Anti-Corruption Laws and its prevailing sanctions.

157 Corrupt gifts and payments of commission

157.1 The Contractor shall not;

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

157.2 Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the provisions of the Public Procurement and Asset Disposal Act (2015) and the Anti-Corruption and Economic Crimes Act (2003) of the Laws of Kenya.

16 SUSPENSION AND TERMINATION BY CONTRACTOR

16.1 Contractor's Entitlement to Suspend Work

16.1.1 If the Architect fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or Sub-Clause 14.7 [Payment], or not receiving instructions that would enable the contractor to proceed with the works in accordance with the program, the Contractor may, after giving not less than 30 days' notice to the Procuring Entity, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

- 1612 The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].
- 1613 If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.
- 1614 If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) payment of any such Cost-plus profit, which shall be included in the Contract Price.

162 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

163 Termination by Contractor

- 163.1 The Contractor shall be entitled to terminate the Contract if:
- a) the Architect fails, within 60 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
 - b) the Contractor does not receive the amount due under an Interim Payment Certificate within 90 days after the expiry of the time stated in Sub-Clause 4.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Procuring Entity's Claims]),
 - c) the Procuring Entity substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
 - d) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
 - e) the Procuring Entity becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
 - f) the Contractor does not receive the Architect instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works].
- 1632 In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Procuring Entity, terminate the Contract. However, in the case of sub-paragraph (f), the Contractor may by notice terminate the Contract immediately.

1633 The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract otherwise.

164 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [Procuring Entity's Entitlement to Termination for Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

- a) cease all further work, except for such work as may have been instructed by the Architect for the protection of life or property or for the safety of the Works,
- b) hand over Contractor's Documents, Plant, Materials, and other work, for which the Contractor has received payment, and
- c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

165 Payment on Termination

After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Procuring Entity shall promptly:

- a) Return the Performance Security to the Contractor,
- b) pay the Contractor in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release], and
- c) pay to the Contractor the amount of any loss or damage sustained by the Contractor as a result of this termination.

17. RISK AND RESPONSIBILITY

17.1 Indemnities

17.1.1 The Contractor shall indemnify and hold harmless the Procuring Entity, the Procuring Entity's Personnel, and their respective agents, against and from all claims, damages, losses, and expenses (including legal fees and expenses) in respect of:

- a) Bodily injury, sickness, disease, or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and
- b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

17.1.2 The Procuring Entity shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Procuring Entity, the Procuring Entity's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property], unless and to the extent that any such damage or loss is attributable to any negligence, willful act or breach of the Contract by the contractor, the contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

17.2 Contractor's Care of the Works

17.2.1 The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Procuring Entity. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Procuring Entity.

17.2.2 After responsibility has accordingly passed to the Procuring Entity, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

17.2.3 If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

17.2.4 The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

173 Procuring Entity's Risks

The risks referred to in Sub-Clause 17.4 [Consequences of Procuring Entity's Risks] below, in so far as they directly affect the execution of the Works in Kenya, are:

- a) War hostilities (whether war be declared or not),
- b) rebellion, riot, commotion or disorder, terrorism, sabotage by persons other than the Contractor's Personnel,
- c) explosive materials, ionizing gradiation or contamination by radioactivity, except as may be attributable to the Contractor's use of such explosives, radiation or radio-activity,
- d) pressure waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds,
- e) use or occupation by the Procuring Entity of any part of the Permanent Works, except as may be specified in the Contract,
- f) design of any part of the Works by the Procuring Entity's Personnel or by others for whom the Procuring Entity is responsible, and
- g) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventive precautions.

174 Consequences of Procuring Entity's Risks

174.1 If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Architect and shall rectify this loss or damage to the extent required by the Engineer.

174.2 If the Contractor suffers delay and/ or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Architect and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) An extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (e) and (g) of Sub-Clause 17.3 [Procuring Entity's Risks], Accrued Costs shall be payable.

174.3 After receiving this further notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

175 Intellectual and Industrial Property Rights

175.1 In this Sub-Clause, "infringement" shall refer to an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" shall refer to a claim (or proceedings pursuing a claim) alleging an infringement.

175.2 Whenever a Party does not give notice to the other Party of any claim within 30 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

175.3 The Procuring Entity shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

- a) An unavoidable result of the Contractor's compliance with the Contract, or
- b) A result of any Works being ingused by the Procuring Entity:
 - i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.

175.4 The Contractor shall indemnify and hold the Procuring Entity harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

1755 If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

1756 For operation and maintenance of any plant or equipment installed, the contractor shall grant a non-exclusive and non-transferable license to the Procuring Entity under the patent, utility models, or other intellectual rights owned by the contractor or a third party from whom the contract or has received the rights to grant sub-licenses and shall also grant to the Procuring Entity a non-exclusive and non-transferable rights (without the rights to sub-license) to use the know-how and other technical information disclosed to the contractor or under the contract. Nothing contained here-in shall be construed as transferring ownership of any patent, utility model, trademark, design, copy right, know-how or other intellectual rights from the contractor or any other third party to the Procuring Entity.

176 Limitation of Liability

176.1 Neither Party shall be liable to the other Party for loss of use of any works, loss of profit, loss of any contractor for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4(b) [Consequences of Procuring Entity's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].

176.2 The total liability of the Contractor to the Procuring Entity, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Procuring Entity's Equipment and Free-Issue Materials], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in **the Special Conditions of Contract**, or (if such multiplier or other sum is not so stated) the Accepted Contract Amount.

176.3 This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

177 Use of Procuring Entity's Accommodation/Facilities

177.1 The Contractor shall take full responsibility for the care of the Procuring Entity provided accommodation and facilities, if any, as detailed in the Specification, from the respective dates of hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).

177.2 If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Procuring Entity is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Engineer.

18 INSURANCE

18.1 General Requirements for Insurances

18.1.1 In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

18.1.2 Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Procuring Entity. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

- 18.13 Wherever the Procuring Entity is the insuring Party, each insurance shall be effected with insurers and in terms acceptable to the Contractor. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.
- 18.14 If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Procuring Entity shall act for Procuring Entity's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.
- 18.15 Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.
- 18.16 The relevant insuring Party shall, within the respective periods stated in **the Special Conditions of Contract** (calculated from the Commencement Date), submit to the other Party:
- a) Evidence that the insurances described in this Clause have been effected, and
 - b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].
- 18.17 When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Engineer.
- 18.18 Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.
- 18.19 Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or at attempts to make) any alteration, the Party first notified by the insurers shall promptly give notice to the other Party.
- 18.1.10 If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.
- 18.1.11 Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Procuring Entity, under the other terms of the Contract otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Procuring Entity.
- 18.1.12 Procuring Entity in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.
- 18.1.13 Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Procuring Entity's Claims] or Sub-Clause 20.1 [Contractor's Claims], as applicable.
- 18.1.14 The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

182 Insurance for Works and Contractor's Equipment

- 182.1 The insuring Party shall insure the Works, Plant, Material and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.
- 182.2 The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).
- 182.3 The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.
- 182.4 Unless otherwise stated in the Special Conditions, insurances under this Sub-Clause:
- a) Shall be effected and maintained by the Contractor as insuring Party,
 - b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated to the Party actually bearing the costs of rectifying the loss or damage,
 - c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Procuring Entity's Risks],
 - d) shall also cover, to the extent specifically required in the tendering documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Procuring Entity of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Procuring Entity's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the **Special Conditions** of Contract (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
 - e) may however exclude loss of, damage to, and reinstatement of:
 - i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,
 - iii) a part of the Works which has been taken over by the Procuring Entity, except to the extent that the Contractor is liable for the loss or damage, and
 - iv) Goods while they are not in Kenya, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].
- 182.5 If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Procuring Entity, with supporting particulars. The Procuring Entity shall then (i) be entitled subject to Sub-Clause 2.5 [Procuring Entity's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

183 Insurance against Injury to Persons and Damage to Property

- 183.1 The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

- 1832 This insurance shall be for a limit per occurrence of not less than the amount stated in **the Special Conditions of Contract**, with no limit on the number of occurrences. If an amount is not stated in the **Special Conditions of Contract**, this Sub-Clause shall not apply.
- 1833 Unless otherwise stated in the Special Conditions, the insurances specified in this Sub-Clause:
- a) Shall be effected and maintained by the Contractor as insuring Party,
 - b) shall be in the joint names of the Parties,
 - c) shall be extended to cover liability for all loss and damage to the Procuring Entity's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
 - d) may however exclude liability to the extent that it arises from:
 - i) the Procuring Entity's right to have the Permanent Works executed on, over, under, in or
 - ii) through any land, and to occupy this land for the Permanent Works,
 - iii) damage which is an unavoidable result of the Contractor's obligations to execute the
 - iv) Works and remedy any defects, and
 - v) a cause listed in Sub-Clause 17.3 [Procuring Entity's Risks], except to the extent that cover is available at commercially reasonable terms.

184 Insurance for Contractor's Personnel

- 184.1 The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.
- 184.2 The insurance shall cover the Procuring Entity and the Architect against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Procuring Entity or of the Procuring Entity's Personnel.
- 184.3 The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

19. FORCE MAJEURE

19.1 Definition of Force Majeure

- 19.1.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:
- a) Which is beyond a Party's control,
 - b) Which such Party could not reasonably have provided against before entering into the Contract,
 - c) which, having arisen, such Party could not reasonably have avoided or overcome, and
 - d) which is not substantially attributable to the other Party.
- 19.1.2 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:
- a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
 - b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
 - c) riot, commotion, disorder, strike or lock out by persons other than the Contractor's Personnel,
 - d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
 - e) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

192 Notice of Force Majeure

- 192.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.
- 192.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.
- 192.3 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to the obligations of either Party to make payments to the other Party under the Contract.

193 Duty to Minimize Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure. A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

194 Consequences of Force Majeure

- 194.1 If the Contractor is prevented from performing his substantial obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
- a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
 - b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in sub-paragraphs (ii) to (iv), occurs in Kenya, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment].
- 194.2 After receiving this notice, the Architect shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

195 Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

196 Optional Termination, Payment and Release

- 196.1 If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].
- 196.2 Upon such termination, the Architect shall determine the value of the work done and issue a Payment Certificate which shall include:
- a) The amounts payable for any work carried out for which a price is stated in the Contract;
 - b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Procuring Entity when paid for by the Procuring Entity, and the Contractor shall place the same at the Procuring Entity's disposal;
 - c) other Cost or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;

- d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
- e) the Cost of repatriation of the Contractor's staff and lab or employed wholly in connection with the Works at the date of termination.

197 Release from Performance

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- a) The Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- b) The sum payable by the Procuring Entity to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

20 SETTLEMENT OF CLAIMS AND DISPUTES

20.1 Contractor's Claims

- 20.1.1 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 Engineer, 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.
- 20.1.2 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.
- 20.1.3 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.
- 20.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at an other location acceptable to the Engineer. Without admitting the Procuring Entity's liability, the Architect 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 Architect to inspect all these records and shall (if instructed) submit copies to the Engineer.
- 20.1.5 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 Engineer, the Contractor shall send to the Architect 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 Architect 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 Engineer.
- 20.1.6 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 Architect and approved by the Contractor, the Architect 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.
- 20.1.7 Within the above defined period of 42 days, the Architect shall proceed in accordance with Sub-Clause 3.5 [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.
- 20.1.8 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.
- 20.1.9 If the Architect does not respond within the time frame defined in this Clause, either Party may consider that the claim is rejected by the Architect and any of the Parties may refer the dispute for amicable settlement in accordance with Clause 20.3.

- 20.1.10 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 20.3.

202 Procuring Entity's Claims

- 202.1 If the Procuring Entity considers itself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Procuring Entity or the Architect shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Procuring Entity's Equipment and Free-Issue Materials], or for other services requested by the Contractor.
- 202.2 The notice shall be given as soon as practicable and no longer than 30 days after the Procuring Entity became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.
- 202.3 The particulars shall specify the Clause or other basis of the claim and shall include substantiation of the amount and/or extension to which the Procuring Entity considers itself to be entitled in connection with the Contract. The Architect shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Procuring Entity is entitled to be paid by the Contractor, and/ or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].
- 202.4 This amount may be included as a deduction in the Contract Price and Payment Certificates. The Procuring Entity shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

203 Amicable Settlement

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 20.1 above should move to commence arbitration after 60 days from the day on which a notice of a claim was given, even if no attempt at an amicable settlement has been made.

204 Matters that may be referred to arbitration

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) Whether or not the issue of an instruction by the Architect is empowered by these Conditions.
- b) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
- c) Any dispute arising in respect of risks arising from matters referred to in Clause 17.3 and Clause 19.
- e) 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.

205 Arbitration

- 205.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 20.3 shall be finally settled by arbitration.
- 205.2 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.

- 2053 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.
- 2054 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.
- 2055 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 require mention had been given.
- 2056 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Architect from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
- 2057 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.
- 2057 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Architect shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 2058 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.
- 206 Arbitration with National Contractors**
- 206.1 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
- 2062 The institution written to first by the aggrieved party shall take precedence over all other institutions.
- 207 Arbitration with Foreign Contractors**
- 207.1 Arbitration with foreign contractors shall be conducted in accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL); or with proceedings administered by the International Chamber of Commerce (ICC) and conducted under the ICC Rules of Arbitration; by one or more arbitrators appointed in accordance with said arbitration rules.
- 2072 The place of arbitration shall be a location specified in the SCC; and the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.4 [Law and Language].

208 Alternative Arbitration Proceedings

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.

209 Failure to Comply with Arbitrator's Decision

209.1 The award of such Arbitrator shall be final and binding up on the parties.

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

20.10 Contract operations to continue

Notwithstanding any reference to arbitration herein,

1.1.1 the parties shall continue to perform their respective obligations under the Contract unless theyotherwise agree; and

1.1.2 the Procuring Entity shall pay the Contractor any monies due the Contractor.

Section IX - Special Conditions of Contract

The following Special Conditions shall supplement the GCC. Whenever there is a conflict, the provisions here in shall prevail over those in the GCC.

Conditions	Sub-Clause	Data
Part A - Contract Data		
Procuring Entity's name and address	Heading	Murang'a University of Technology
Name and Reference No. of the Contract	Heading and 1.1	SUPPLY AND INSTALL FURNITURE FOR THE Proposed construction of Tuition Block Phase II BUILDING for Murang'a University of Technology Ref No. MUT/T 07/AUDITORIUM FURNITURE/2025/2026
Engineer's Name and address	Heading and 3.1.1	UNES
Contractor's Representative's name	4.3.1	<i>[insert the name of the Contractor's Representative agreed by the Procuring Entity prior to Contract signature]</i>
Key Personnel names	16.9.1	<i>[insert the name of each Key Personnel agreed by the Procuring Entity prior to Contract signature]</i>
Time for Completion	1.1.	90 DAYS
Defects Notification Period	1.1	183 days
Sections	1.1	Not Applicable
Electronic transmission systems	1.3	Not Applicable
Time for the Parties entering into a Contract Agreement	1.6	Within 30 days
Commencement Date	8.1.1	To be determined at contract execution.
Time for access to the Site	2.1.1	No later than the Commencement Date stated on executed contract, and not later than fourteen (14) days after Commencement Date
Architect Duties and Authority	3.1.6 (b) (ii)	Variations resulting in an increase of the Accepted Contract Amount in excess of 25 % shall require approval of the Procuring Entity.
Performance Security	4.2.1	The performance security will be in the form of a performance bond in the amount(s) of Ten (10%) percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.
Normal working hours	6.5	08.00 to 17.00 Hours
Delay damages for the Works	8.7 & 14.15(b)	0.04 % of the Contract Price per day.
Maximum amount of delay damages	8.7.1	10 % of the final Contract Price.
Provisional Sums	13.6. (b)(ii)	3%
Adjustment for Changes in Legislation	13.8	Shall apply
Adjustments for Changes in Cost	13.9	Not Applicable
Bill of Quantities	14.1.1(c)	The bills shall be deemed to have been prepared in accordance with the principles of the latest edition of the Standard Method of Measurement of Building Works for East Africa.
Total advance payment	14.2.1	Not Applicable
Repayment amortization rate of advance payment	14.2.5 (b)	Not Applicable
Percentage of Retention	14.3.2 (c)	10 %
Limit of Retention Money	14.3.2 (c)	10 % of the Accepted Contract Amount

Conditions	Sub-Clause	Data
Plant and Materials	14.5.3(b)(i)	Sub-Clause 14.5 is Not Applicable
	14.5.3(c)(i)	Plant and Materials for payment when delivered to the Site Not Applicable
Minimum Amount of Interim Payment Certificates	14.6.2	4 % of the Accepted Contract Amount.
Publishing source of commercial interest rates for financial charges in case of delayed payment	14.8	Annual rate of three percentage points above the mean rate of the Central Bank in Kenya i.e., 1.12% rate per month of delayed payment.
Maximum total liability of the Contractor to the Procuring Entity	17.6.2	The Accepted Contract Amount,
Insurance:	18.2 & 18.3	The Contractor shall be responsible for effecting and maintaining the insurance. 14 days 30 days
Periods for submission of insurance: a. evidence of insurance. b. relevant policies	18.1.6	
Maximum amount of deductibles for insurance of the Procuring Entity's risks	18.2.4 (d)	<i>[Insert maximum amount of deductibles]</i>
Minimum amount of third-party insurance	18.3.2	<i>[Insert amount of third-party insurance]</i>
The place of arbitration	20.7.2	Nairobi, Kenya

SECTION X - CONTRACT FORMS

FORM No. 1 - NOTIFICATION OF INTENTION TO AWARD FORM NO. 2

– REQUEST FOR REVIEW

FORM No. 3-LETTER OF AWARD

FORM No. 4 - CONTRACT AGREEMENT

FORM No. 5 - PERFORMANCE SECURITY [Option 1 - Unconditional Demand Bank Guarantee] FORM

No. 6- PERFORMANCE SECURITY [Option 2– Performance Bond]

FORM No. 7 - ADVANCE PAYMENT SECURITY

FORM No. 8 - RETENTION MONEY SECURITY

FORM No 1: NOTIFICATION OF INTENTION TO AWARD OF CONTRACT

This Notification of Award shall be sent to each Tenderer that submitted a Tender and was not successful. 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 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) 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 by submitting a Procurement-related Complaint in relation to the decision to award the contracts.

a) The successful tenderers

i) Name of successful Tender _____

ii) Address of the successful Tender _____

iii) Contract price of the successful Tender Kenya Shillings _____
(in words _____)

b) The reasons for your tender being unsuccessful are as follows:

c) 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.

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 dead line 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]*
 - iii) Agency: *[insert name of Procuring Entity]*
 - iv) Email address: *[insert email address]*
- 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 email address]*
- 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 www.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. Stand still 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: _____

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 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 there in,

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 Notification of Award
 - b) the Form 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 here by 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 here by covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects there in, 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 where of the parties here to 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, here by 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 of², 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 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 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 Bond holder 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 Obligated (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 there to, which to the extent here in provided for, are by reference made part hereof and are here in after referred to as the Contract.
3. NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations there under, the Surety may promptly remedy the default, or shall promptly:
 - a) Complete the Contract in accordance with its terms and conditions; or
 - b) 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
 - c) 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 here in or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.
6. In testimony whereof, the Contractor has here unto 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, here by 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, any 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 upto 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 demands 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 there in.
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 20.....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 here by 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..... Indirect.....
	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					
	Email address					
	Occupation or profession					

	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)
2.	Full Name		Directly----- ----- % of shares Indirectly---- ----- % of shares	Directly.....% of voting rights Indirectly----- % 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..... Indirect.....
	National identity card number or Passport number					
	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.						
etc.						

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]


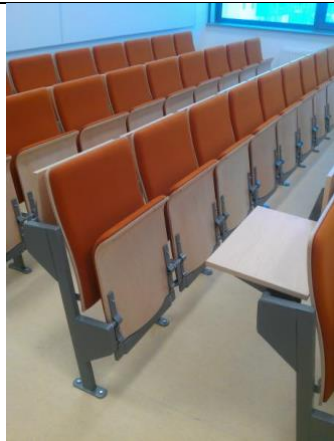
Date this [insert date of signing] day of [Insert month], [insert year]

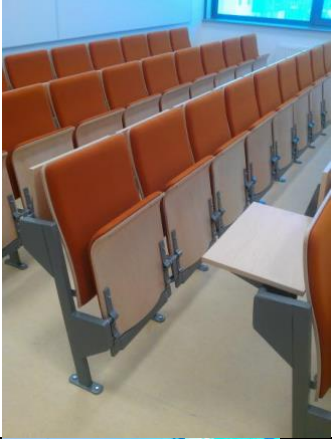



Bidder Official Stamp

FURNITURE ITEMS

BILL NO.2

AUDITORIUM & LECTURE THEATRE FURNITURE SPECIFICATIONS AND QUANTITIES

SAMPLE IMAGE	DESCRIPTION	SIZE (LXWXH)&UNIT	QTY	RATE	AMOUNT
	High density fabric auditorium chair with automated seat retraction system, solid back shell, arm rest & retractable side writing tablet with steel legs fixed to floor, finished with powder coating. With fabric colour of vivid maroon	550X730X900 (mm) NO.	540		
	High-performance lecture hall chair with auto-return seat, plywood back with upholstered fabric* <i>with</i> a retractable <i>back</i> laminate writing tablet. Fabric of Pear colour (code # 74B72E)	500x500x1100 (mm) NO.	277		
TOTAL CARRIED FORWARD			KSHS		
A/LT/1					

SAMPLE IMAGE	DESCRIPTION	SIZE & UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD FROM A/LT/1					
	High-performance lecture hall chair with auto-return seat, plywood back with upholstered fabric of Pear Colour (code # 74B72E)* with side retractable laminate writing tablet.	500x500x1100 (mm) NO.	32		
	High-performance lecture hall chair with auto-return seat, plywood back with upholstered fabric * without retractable writing tablet. Seat fabric colour of Pear (code # 74B72E)	500x500x1100 (mm) NO.	41		
	Front row 4 co-joined stand * with rear retractable laminate tablet, Seat fabric of pearl(code # 74B72E)powder coated metal legs fixed to floor base.	2000x400x720(mm) NO	2		
	5 co-joined stand* with front retractable laminate table, Seat fabric of pearl (code- 74B72E)powder coated metal legs fixed to floor base.	2500x400x720(mm) NO.	1		
TOTAL CARRIED TO GRAND SUMMARY PAGE			KSHS		
A/LT/2					

PC AND PROVISIONAL SUMS

ITEM	DESCRIPTION	UNIT	QTY.	RATE (KES)	AMOUNT (KES)
A B C	<u>BILL NO.3: PROVISIONAL SUMS</u> <u>The following provisional sums should be included in the tender sum but shall be expended at the direction of the Project Manager/Client:</u> Provide a provisional sum of Kenya shillings, Fifty thousand only (Kshs 50,000.00) for samples Provide a provisional sum of Kenya shillings, Two hundred and fifty thousand only (Kshs 250,000.00) for Signage/Seat numbering Provide a provisional sum of Kenya shillings, Five hundred thousand only (Kshs 500,000.00) for Contingencies	SUM SUM SUM			50,000.00 250,000.00 500,000.00
	TOTAL FOR PROVISIONAL SUMS CARRIED TO GRAND SUMMARY				KSHS 800,000.00

GRAND SUMMARY AND SIGNATURE PAGE

ITEM	DESCRIPTION	AMOUNT (KSH)
	<u>FURNITURE FOR LECTURE THEATRE AND AUDITORIUM FOR THE PROPOSED CONSTRUCTION OF MUT TUITION BLOCK II</u>	
GRAND SUMMARY		
	<u>SECTION</u> BILL NO.1 PRELIMINARIES AND GENERAL CONDITIONS BILL NO.2 FURNITURE ITEMS Bill No. 3. PROVISIONAL SUMS LESS: Any Discounts	<u>PAGE NO</u> 72 A/LT/2 PS/1 800,000.00
	TOTAL TENDER PRICE INCLUSIVE OF 16% VAT, CARRIED TO FORWARD TO FORM OF TENDER	KSHS

Signature of Tenderer: _____

Name of Tenderer : _____

Address of Tenderer : _____

Date: _____

Signature of Witness: _____

Name of Witness : _____

Address of Witness: _____

Date:_____

