



REPUBLIC OF KENYA
MINISTRY OF TRANSPORT AND INFRASTRUCTURE, HOUSING AND URBAN
DEVELOPMENT

STATE DEPARTMENT FOR PUBLIC WORKS
COUNTY WORKS OFFICE-GARISSA

PROPOSED
CONSTRUCTION OF PERIMETER WALL, 4No. GATES, 4No. SENTRY BOXES,
2No. WAITING BAYS, CABRO PAVING, 2No. WATCH TOWERS, 3No. TWIN
TOILETS & WATER RETICULATION AND INSTALLATION OF SECURITY
SYSTEM AT GARISSA UNIVERSITY COLLEGE

JOB NO. GUC/01/2016 - 2017

TENDER DOCUMENT

THE PRINCIPAL
GARISSA UNIVERSITY COLLEGE
P.O BOX 1801-70100
GARISSA

OCTOBER 2016

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
Contents.....	(i)
Definitions.....	(ii)
Project Consultants	(iii)
Special Note	(iv)
Form of Tender.....	(v)
Form of Tender Security (Bank)	(vi)
Form of Tender Security (Insurance)	(vii)
Qualification Information	(viii-ix)
Tender questionnaire.....	(x)
Confidential Business Questionnaire	(xi)
SECTION A: Instructions to Tenderers.....	A/1-A/24
SECTION B: Conditions of Contract and Sub-contract Agreement	
-PART I: Conditions of Contract (Main works).....	B/1-B/13
- PART II: Sub-Contract Agreement (Kabcec).....	1-23
SECTION C: Sub-Contract Preliminaries and Conditions.....	C/1-C/24
SECTION D: General Mechanical Specifications	D/1-D/5
SECTION E: Particular specifications for Incinerator.....	E/ 1 – E/ 4
SECTION F: Bills of Quantities & Schedule of unit rates	F/1 - F/13
SECTION G: Technical Schedule of Items to be supplied.....	G/1
SECTION H: Drawing Schedule	H/1
SECTION I: Standard Forms	I/1

DEFINITIONS

The following terms and expressions used in the contract document shall have the following meanings:

The Employer The Principal, Garissa University College
P.O. Box 1801-70100
GARISSA

Project Manager County Works officer
Garissa County,
P.O. Box 41-70100
GARISSA

Employer's representative Deputy Principal (FAP)
Garissa University College,
P.O. Box 1801-70100
GARISSA

SPECIAL NOTES

1. These notes shall form part of the Instructions to Tenderers and Conditions of Contract.
2. The tenderer is required to check the number of pages in this document and should he/she find any missing, or in duplicate, or indistinct he/she should inform the Project Manager
3. Should the tenderer be in any doubt about the precise meaning of any item or figure, for any reason whatsoever, he/she must inform the Project Manager, in order that the correct meaning may be clarified before the date of submission of the tender.
4. No liability will be admitted nor claim allowed, in respect of errors in the tender due to mistakes in the specification, which should have been rectified in the manner, described above.
5. All tenderers must make a declaration that they have not and will not make any payment to any person which can be perceived as an inducement to enable them to win this tender.
6. Any tenderer whose firm uses the titles “Engineer” and “Engineers” must produce evidence of registration of at least one of the directors by the Engineers Registration Board of Kenya to avoid disqualification.

FORM OF TENDER

To: The Principal
Garissa University College.
P.O. Box 1801-70100
GARISSA

Dear Sir,

Proposed Construction of Perimeter Wall, 4No. Gates, 4No. Sentry Boxes, 2No. Waiting Bays, Cabro Paving, 2No. Watch Towers, 3No. Twin Toilets & Water Reticulation and Installation of Security System at Garissa University College.

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

Kshs..... *[Amount in figures]*

Kenya Shillings.....

.....

..... *[Amount in words]*

2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Employer's Representative's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.
3. We agree to abide by this tender for **a period of 120 days from the date of tender opening** and shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.
5. Understand that you are not bound to accept the lowest or any tender you may receive.

Dated this day of20.....

Signaturein the capacity of

duly authorized to sign tenders for and on behalf of:

..... *[Name of Tenderer]*

of.....*[Address of Tenderer]*

PIN No.

VAT CERTIFICATE No.

Witness: Name

Address

Signature

FORM OF TENDER SECURITY (BANK OR INSURANCE)

WHEREAS (Hereinafter called “the Tenderer”) has submitted his tender dated For **Proposed Construction of Perimeter Wall, 4No. Gates, 4No. Sentry Boxes, 2No. Waiting Bays, Cabro Paving, 2No. Watch Towers, 3No. Twin Toilets & Water Reticulation and Installation of Security System at Garissa University College at Garissa Town.**

KNOW ALL PEOPLE by these presents that WE
 Having our registered office at
 (Hereinafter called “the Bank”), are bound unto
 (Hereinafter called “the Employer”) in the sum of Kshs.....
 for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Bank this
 Day of20

THE CONDITIONS of this obligation are:

1. If after tender opening the Tenderer withdraws his tender during the period of tender validity specified in the instructions to Tenderers

or

2. If the Tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
 - (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

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

This guarantee will remain in force for a minimum of **One hundred and fifty (150) days** from the date of tender opening, and any demand in respect thereof should reach the Bank not later than the said date.

.....
(date)

.....
(Signature of the Bank)

.....
 (Witness)

.....
 (Seal)

FORM OF TENDER SECURITY (INSURANCE)

WHEREAS (Hereinafter called “the Tenderer”) has submitted his tender dated For **Proposed Construction of Perimeter Wall, 4No. Gates, 4No. Sentry Boxes, 2No. Waiting Bays, Cabro Paving, 2No. Watch Towers, 3No. Twin Toilets & Water Reticulation and Installation of Security System at Garissa University College at Garissa Town.**

KNOW ALL PEOPLE by these presents that WE
 Having our registered office at
 (Hereinafter called “the Insurance”), are bound unto
 (Hereinafter called “the Employer”) in the sum of Kshs.....
 for which payment well and truly to be made to the said Employer, the Insurance binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Insurance thisDay of20

THE CONDITIONS of this obligation are:

- 3. If after tender opening the Tenderer withdraws his tender during the period of tender validity specified in the instructions to Tenderers
- or
- 4. If the Tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:
 - (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

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

This guarantee will remain in force for a minimum of **One hundred and fifty (150) days** from the date of tender opening, and any demand in respect thereof should reach the Insurance not later than the said date.

.....
(date)

.....
(Signature of the Insurance)

.....
 (Witness)

.....
 (Seal)

QUALIFICATION INFORMATION

1. Individual Tenderers or Individual Members of Joint Ventures

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

Place of registration: _____

Principal place of business _____

Power of attorney of signatory of tender _____

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

Year	Volume	
	Currency	Value

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

Project name	Name of client and contact person	Type of work performed and year of completion	Value of Contract
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

1.4 Major items of Contractor’s Equipment proposed for carrying out the Works. List all information requested below.

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

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

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

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

- 1.7 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of supportive documents.
-
-
-
- 1.8 Name, address and telephone, telex and facsimile numbers of banks that may provide reference if contacted by the Employer.
-
-
- 1.9 Statement of compliance with the requirements of Clause 1.2 of the Instructions to Tenderers.
-
-
- 1.10 Proposed program (work method and schedule) for the whole of the Works.

2 Joint Ventures

- 2.4 The information listed in 1.1 – 1.10 above shall be provided for each partner of the joint venture.
- 2.5 The information required in 1.11 above shall be provided for the joint venture.
- 2.6 Attach the power of attorney of the signatory(ies) of the tender authorizing signature of the tender on behalf of the joint venture
- 2.7 Attach the Agreement among all partners of the joint venture (and which is legally binding on all partners), which shows that:
- a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
 - b) one of the partners will be nominated as being in charge, authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture; and
 - c) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

TENDER QUESTIONNAIRE

Please fill in block letters.

- 1. Full names of tenderer;
.....
- 2. Full address of tenderer to which tender correspondence is to be sent (unless an agent has been appointed below);
.....
- 3. Telephone number (s) of tenderer;
.....
- 4. Telex of tenderer;
.....
- 5. Name of tenderer's representative to be contacted on matters of the tender during the tender period;
.....
- 6. Details of tenderer's nominated agent (if any) to receive tender notices. This is essential if the tenderer does not have his registered address in Kenya (name, address, telephone, telex);
.....
.....

Signature of Tenderer

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

CONFIDENTIAL BUSINESS QUESTIONNAIRE

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

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

Part 1 – General

Business Name

Location of business premises; Country/Town.....

Plot No..... Street/Road

Postal Address..... Tel No.....

Nature of Business.....

Current Trade Licence No..... Expiring date.....

Maximum value of business which you can handle at any time: K. pound.....

Name of your bankers.....

Branch.....

Part 2 (a) – Sole Proprietor

Your name in full..... Age.....

Nationality..... Country of Origin.....

Citizenship details

Part 2 (b) – Partnership

Give details of partners as follows:

	<i>Name in full</i>	<i>Nationality</i>	<i>Citizenship Details</i>	<i>Shares</i>
1
2
3

SECTION A:

INSTRUCTIONS TO TENDERERS

INSTRUCTIONS TO TENDERERS

CONTENTS

<u>CLAUSE NUMBERS</u>		<u>PAGE</u>
	<u>DESCRIPTION</u>	
	<u>GENERAL</u>	
1.	Definitions	A-1
2.	Eligibility and Qualification Requirements	A-1-A-2
3.	Cost of Tendering	A-3
4.	Site Visit	A-3
	<u>TENDER DOCUMENTS</u>	
5.	Tender Documents	A-3 - A-4
6.	Clarification of Tender Documents	A-4
7.	Amendments of Tender Documents	A-4-A-5
	<u>PREPARATION OF TENDER</u>	
8.	Language of Tender	A-5
9.	Documents Comprising the Tender	A-5
10.	Tender Prices	A-5-A-6
11.	Currencies of Tender and Payment	A-7
12.	Tender Validity	A-7-A-8
13.	Tender Surety	A-8
14.	No Alternative Offers	A-8
15.	Format and Signing of Tenders	A-9
	<u>SUBMISSION OF TENDERS</u>	
16.	Sealing and Marking of Tenders	A-10
17.	Deadline and Submission of Tenders	A-10
18.	Modification and Withdrawal of Tenders	A-10-A-11
	<u>TENDER OPENING AND EVALUATION</u>	
19.	Tender Opening	A-11
20.	Process to be Confidential	A-12
21.	Clarification of Tenders	A-12
		<u>PAGE</u>
22.	Determination of Responsiveness	A-12-A-13
23.	Correction of Errors	A-13
24.	Conversion to Single Currency	A-13
25.	Evaluation and Comparison of Tenders	A-13-A-14
	<u>AWARD OF CONTRACT</u>	
26.	Award	A-14
27.	Notification of Award	A-15
28.	Performance Guarantee	A-15
29.	Advance Payment	A-16
30.	Appendix to Instructions to Tenderers	A-17

INSTRUCTION TO TENDERERS

Note: The tenderer must comply with the following conditions and instructions and failure to do so is liable to result in rejection of the tender.

GENERAL

1. Definitions

- (a) **“Tenderer”** means any person or persons partnership firm or company submitting a sum or sums in the Bills of Quantities in accordance with the Instructions to Tenderers, Conditions of Contract Parts I and II, Specifications, Drawings and Bills of Quantities for the work contemplated, acting directly or through a legally appointed representative.
- (b) **“Approved tenderer”** means the tenderer who is approved by the Employer.
- (c) Any noun or adjective derived from the word **“tender”** shall be read and construed to mean the corresponding form of the noun or adjective **“bid”**. Any conjugation of the verb **“tender”** shall be read and construed to mean the corresponding form of the verb **“bid.”**
- (d) **“Employer”** means a Central Government Ministry, Local Authority, State Corporation or any other Public Institution.

2. Eligibility and Qualification Requirements

2.1 This invitation to tender is open to all tenderers who have been prequalified.

2.2 To be eligible for award of Contract, the tenderer shall provide evidence satisfactory to the Employer of their eligibility under Sub clause 2.1 above and of their capability and adequacy of resources to effectively carry out the subject Contract. To this end, the tenderer shall be required to update the following information already submitted during prequalification:-

- (a) Details of experience and past performance of the tenderer on the works of a similar nature within the past five years and details of current work on hand and other contractual commitments.
- (b) The qualifications and experience of key personnel proposed for administration and execution of the contract, both on and off site.
- (c) Major items of construction plant and equipment proposed for use in carrying out the Contract. Only reliable plant in good working order and suitable for the work required of it shall be shown on this schedule. The tenderer will also indicate on this schedule when each item will be available on the Works. Included also should be a schedule of plant, equipment and material to be imported for the purpose of the Contract, giving details of make, type, origin and CIF value as appropriate.
- (d) Details of subcontractors to whom it is proposed to sublet any portion of the Contract and for whom authority will be requested for such subletting in accordance with clause 4 of the Conditions of Contract.
- (e) A draft Program of Works in the form of a bar chart and Schedule of Payment which shall form part of the Contract if the tender is accepted. Any change in the Program or Schedule shall be subjected to the approval of the Engineer.
- (f) Details of any current litigation or arbitration proceedings in which the Tenderer is involved as one of the parties.

2.3 Joint Ventures

Tenders submitted by a joint venture of two or more firms as partners shall comply with the following requirements:-

- (a) The tender, and in case of a successful tender, the Form of Agreement, shall be signed so as to be legally binding on all partners.

- (b) One of the partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
- (c) The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the Contract including payment shall be done exclusively with the partner in charge.

- (d) All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Form of Tender and the Form of Agreement (in case of a successful tender).

- (e) A copy of the agreement entered into by the joint venture partners shall be submitted with the tender.

3. Cost of Tendering

The tenderer shall bear all costs associated with the preparation and submission of his tender and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

4. Site Visit

4.1 The tenderer is advised to visit and examine the Site and its surroundings and obtain for himself on his own responsibility, all information that may be necessary for preparing the tender and entering into a contract. The costs of visiting the Site shall be the tenderer's own responsibility.

4.2 The tenderer and any of his personnel or agents will be granted permission by the Employer to enter upon premises and lands for the purpose of such inspection, but only upon the express condition that the tenderer, his personnel or agents, will release and indemnify the Employer from and against all liability in respect of, and will be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expenses however caused, which but for the exercise of such permission, would not have arisen.

4.3 The Employer shall organize a site visit at a date to be notified. A representative of the Employer will be available to meet the intending tenderers at the Site.

Tenderers must provide their own transport. The representative will not be available at any other time for site inspection visits.

Each tenderer shall complete the Certificate of Tenderer's Visit to the Site, whether he in fact visits the Site at the time of the organized site visit or by himself at some other time.

TENDER DOCUMENTS

5. Tender Documents

5.1 The Tender documents comprise the documents listed herebelow and should be read together with any Addenda issued in accordance with Clause 7 of these instructions to tenderers.

- a. Form of Invitation for Tenders
- b. Instructions to Tenderers

- c. Form of Tender
- d. Appendix to Form of Tender
- e. Form of Tender Surety
- f. Statement of Foreign Currency Requirements
- g. Form of Performance Security
- h. Form of Agreement
- i. Form of Advance payment Bank Guarantee
- j. Schedules of Supplementary Information
- k. General Conditions of Contract – Part I
- l. Conditions of Particular Application – Part II
- m. Specifications
- n. Bills of Quantities
- o. Drawings

5.2 The tenderer is expected to examine carefully all instructions, conditions, forms, terms, specifications and drawings in the tender documents. Failure to comply with the requirements for tender submission will be at the tenderer's own risk. Pursuant to clause 22 of Instructions to Tenderers, tenders which are not substantially responsive to the requirements of the tender documents will be rejected.

5.3 All recipients of the documents for the proposed Contract for the purpose of submitting a tender (whether they submit a tender or not) shall treat the details of the documents as "private and confidential".

6. Clarification of Tender Documents

6.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing or by telex, cable or facsimile at the Employer's mailing address indicated in the Invitation to Tender. The Employer will respond in writing to any request for clarification which he receives earlier than 28 days prior to the deadline for the submission of tenders. Written copies of the Employer's response (including the query but without identifying the source of the inquiry) will be sent to all prospective tenderers who have purchased the tender documents.

7. Amendment of Tender Documents

7.1 At any time prior to the deadline for submission of tenders the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective tenderer, modify the tender documents by issuing Addenda.

- 7.2 Any Addendum will be notified in writing or by cable, telex or facsimile to all prospective tenderers who have purchased the tender documents and will be binding upon them.
- 7.3 If during the period of tendering, any circular letters (tender notices) shall be issued to tenderers by, or on behalf of, the Employer setting forth the interpretation to be placed on a part of the tender documents or to make any change in them, such circular letters will form part of the tender documents and it will be assumed that the tenderer has taken account of them in preparing his tender. The tenderer must promptly acknowledge any circular letters he may receive.
- 7.4 In order to allow prospective tenderers reasonable time in which to take the Addendum into account in preparing their tenders, the Employer may, at his discretion, extend the deadline for the submission of tenders.

PREPARATION OF TENDERS

8. Language of Tender

- 8.1 The tender and all correspondence and documents relating to the tender exchanged between the tenderer and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the tenderer with the tender may be in another language provided they are accompanied by an appropriate translation of pertinent passages in the above stated language. For the purpose of interpretation of the tender, the English language shall prevail.

9. Documents Comprising the Tender

- 9.1 The tender to be prepared by the tenderer shall comprise: the Form of Tender and Appendix thereto, a Tender Surety, the Priced Bills of Quantities and Schedules, the information on eligibility and qualification, and any other materials required to be completed and submitted in accordance with the Instructions to Tenderers embodied in these tender documents. The Forms, Bills of Quantities and Schedules provided in the tender documents shall be used without exception (subject to extensions of the schedules in the same format and to the provisions of clause 13.2 regarding the alternative forms of Tender Surety).

10. Tender Prices

- 10.1 All the insertions made by the tenderer shall be made in INK and the tenderer shall clearly form the figures. The relevant space in the Form of Tender and Bills of Quantities shall be completed accordingly

without interlineations or erasures except those necessary to correct errors made by the tenderer in which case the erasures and interlineations shall be initialed by the person or persons signing the tender.

- 10.2 A price or rate shall be inserted by the tenderer for every item in the Bills of Quantities whether the quantities are stated or not items against which no rate or price is entered by the tenderer will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bills of Quantities.

The prices and unit rates in the Bills of Quantities are to be the full [all-inclusive] value of the work described under the items, including all costs and expenses which may be necessary and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. All duties and taxes and other levies payable by the Contractor under the Contract or for any other cause as of the date 28 days prior to the deadline for the submission of tenders, shall be included in the rates and prices and the total tender prices submitted by the Tenderer.

Each price or unit rate inserted in the Bills of Quantities should be a realistic estimate for completing the activity or activities described under that particular item and the tenderer is advised against inserting a price or rate against any item contrary to this instruction.

Every rate entered in the Bills of Quantities, whether or not such rate be associated with a quantity, shall form part of the Contract. The Employer shall have the right to call for any item of work contained in the Bills of Quantities, and such items of work to be paid for at the rate entered by the tenderer and it is the intention of the Employer to take full advantage of unbalanced low rates.

- 10.3 Unless otherwise specified the tenderer must enter the amounts representing 10% of the sub-total of the summary of the Bills of Quantities for Contingencies and Variation of Prices [V.O.P.] payments in the summary sheet and add them to the sub-total to arrive at the tender amount.
- 10.4 The tenderer shall furnish with his tender written confirmation from his suppliers or manufacturers of unit rates for the supply of items listed in the Conditions of Contract clause 47 where appropriate.
- 10.5 The rates and prices quoted by the tenderer are subject to adjustment during the performance of the Contract only in accordance with the provisions of the Conditions of Contract. The tenderer shall complete the schedule of basic rates and shall submit with his tender such other supporting information as required under clause 47 of the Conditions of Contract Part II.

11. Currencies of Tender and Payment

- 11.1 Tenders shall be priced in Kenya Shillings and the tender sum shall be in Kenya Shillings.
- 11.2 Tenderers are required to indicate in the Statement of Foreign Currency Requirements, which forms part of the tender, the foreign currency required by them. Such currency should generally be the currency of the country of the tenderer's main office. However, if a substantial portion of the tenderer's expenditure under the Contract is expected to be in countries other than his country of origin, then he may state a corresponding portion of the contract price in the currency of those other countries. However, the foreign currency element is to be limited to two (2) different currencies and a maximum of 30% (thirty percent) of the Contract Price.
- 11.3 The rate of rates of exchange used for pricing the tender shall be selling rate or rates of the Central Bank ruling on the date thirty (30) days before the final date for the submission of tenders.
- 11.4 Tenderers must enclose with their tenders, a brief justification of the foreign currency requirements stated in their tenders.

12. Tender Validity

- 12.1 The tender shall remain valid and open for acceptance for a period of one hundred and twenty (120) days from the specified date of tender opening or from the extended date of tender opening (in accordance with clause 7.4 here above) whichever is the later.
- 12.2 In exceptional circumstances prior to expiry of the original tender validity period, the Employer may request the tenderer for a specified extension of the period of validity. The request and the responses thereto shall be made in writing or by cable, telex or facsimile. A tenderer may refuse the request without forfeiting his Tender Surety. A tenderer agreeing to the request will not be required nor permitted to modify his tender, but will be required to extend the validity of his Tender Surety correspondingly.

13. Tender Surety

- 13.1 The tenderer shall furnish as part of his tender, a Tender Surety in the amount stated in the Appendix to Instructions to Tenderers.
- 13.2 The unconditional Tender Surety shall be in Kenya Shillings and be in form of a certified cheque, a bank draft, an irrevocable letter of credit or a guarantee from a reputable Bank approved by the Employer located in the Republic of Kenya.

The format of the Surety shall be in accordance with the sample form of Tender Surety included in these tender documents; other formats may be permitted subject to the prior approval of the Employer. The Tender Surety shall be valid for twenty eight (28) days beyond the tender validity period.

- 13.3 Any tender not accompanied by an acceptable Tender Surety will be rejected by the Employer as non-responsive.
- 13.4 The Tender Sureties of unsuccessful tenderers will be returned as promptly as possible but not later than twenty eight (28) days after concluding the Contract execution and after a Performance Security has been furnished by the successful tenderer. The Tender Surety of the successful tenderer will be returned upon the tenderer executing the Contract and furnishing the required Performance Security.
- 13.5 The Tender Surety may be forfeited:
 - (a) if a tenderer withdraws his tender during the period of tender validity: or
 - (b) in the case of a successful tenderer, if he fails
 - (i) to sign the Agreement, or
 - (ii) to furnish the necessary Performance Security
 - (c) if a tenderer does not accept the correction of his tender price pursuant to clause 23.

14. No Alternative Offers

- 14.1 The tenderer shall submit an offer which complies fully with the requirements of the tender documents.

Only one tender may be submitted by each tenderer either by himself or as partner in a joint venture.

- 14.2 The tenderer shall not attach any conditions of his own to his tender. The tender price must be based on the tender documents. The tenderer is not required to present alternative construction options and he shall use without exception, the Bills of Quantities as provided, with the amendments as notified in tender notices, if any, for the calculation of his tender price.

Any tenderer who fails to comply with this clause will be disqualified.

15. Pre-Tender Meeting

- 15.1 The tenderer's designated representative is invited to attend a pre-

tender meeting, which if convened, will take place at the venue and time stated in the Invitation to Tender. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

- 15.2 The tenderer is requested as far as possible to submit any questions in writing or by cable, to reach the Employer not later than seven days before the meeting. It may not be practicable at the meeting to answer questions received late, but questions and responses will be transmitted in accordance with the following:
- (a) Minutes of the meeting, including the text of the questions raised and the responses given together with any responses prepared after the meeting, will be transmitted without delay to all purchasers of the tender documents. Any modification of the tender documents listed in --Clause 9 which may become necessary as a result of the pre-tender meeting shall be made by the Employer exclusively through the issue of a tender notice pursuant to Clause 7 and not through the minutes of the pre-tender meeting.
 - (b) Non-attendance at the pre-tender meeting will not be cause for disqualification of a bidder.

16. Format and Signing of Tenders

- 16.1 The tenderer shall prepare his tender as outlined in clause 9 above and mark appropriately one set "ORIGINAL" and the other "COPY".
- 16.2 The copy of the tender and Bills of Quantities shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the tenderer. Proof of authorization shall be furnished in the form of the written power of attorney which shall accompany the tender. All pages of the tender where amendments have been made shall be initialed by the person or persons signing the tender.
- 16.3 The complete tender shall be without alterations, interlineations or erasures, except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

SUBMISSION OF TENDERS

17. Sealing and Marking of Tenders

- 17.1 The tenderer shall seal the original and copy of the tender in separated envelopes, duly marking the envelopes as "ORIGINAL" and "COPY". The envelopes shall then be sealed in an outer envelope.

- 17.2 The inner and outer envelopes shall be addressed to the Employer at the address stated in the Appendix to Instructions to Tenderers and bear the name and identification of the Contract stated in the said Appendix with a warning not to open before the date and time for opening of tenders stated in the said Appendix.
- 17.3 The inner envelopes shall each indicated the name and address of the tenderer to enable the tender to be returned unopened in case it is declared “late”, while the outer envelope shall bear no mark indicating the identity of the tenderer.
- 17.4 If the outer envelope is not sealed and marked as instructed above, the Employer will assume no responsibility for the misplacement or premature opening of the tender. A tender opened prematurely for this cause will be rejected by the Employer and returned to the tenderer.

18 Deadline for Submission of Tenders

- 18.1 Tenders must be received by the Employer at the address specified in clause 17.2 and on the date and time specified in the Letter of Invitation, subject to the provisions of clause 7.4, 18.2 and 18.3.

Tenders delivered by hand must be placed in the “tender box” provided in the office of the Employer.

Proof of posting will not be accepted as proof of delivery and any tender delivered after the above stipulated time, from whatever cause arising will not be considered.

- 18.2 The Employer may, at his discretion, extend the deadline for the submission of tenders through the issue of an Addendum in accordance with clause 7, in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline shall thereafter be subject to the new deadline as extended.
- 18.3 Any tender received by the Employer after the prescribed deadline for submission of tender will be returned unopened to the tenderer.

19 Modification and Withdrawal of Tenders

- 19.1 The tenderer may modify or withdraw his tender after tender submission, provided that written notice of the modification or withdrawal is received by the Employer prior to prescribed deadline for submission of tenders.
- 19.2 The tenderer’s modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions for

the submission of tenders, with the inner and outer envelopes additionally marked “MODIFICATION” or “WITHDRAWAL” as appropriate.

- 19.3 No tender may be modified subsequent to the deadline for submission of tenders.
- 19.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the period of tender validity specified on the tender form. Withdrawal of a tender during this interval will result in the forfeiture of the Tender Surety.
- 19.5 Subsequent to the expiration of the period of tender validity prescribed by the Employer, and the tenderer having not been notified by the Employer of the award of the Contract or the tenderer does not intend to conform with the request of the Employer to extend the period of tender validity, the tenderer may withdraw his tender without risk of forfeiture of the Tender Surety.

TENDER OPENING AND EVALUATION

20 Tender Opening

- 20.1 The Employer will open the tenders in the presence of the tenderers’ representatives who choose to attend at the time and location indicated in the Letter of Invitation to Tender. The tenderers’ representatives who are present shall sign a register evidencing their attendance.
- 20.2 Tenders for which an acceptable notice of withdrawal has been submitted, pursuant to clause 19, will not be opened. The Employer will examine the tenders to determine whether they are complete, whether the requisite Tender Sureties have been furnished, whether the documents have been properly signed and whether the tenders are generally in order.
- 20.3 At the tender opening, the Employer will announce the tenderer’s names, total tender price, tender price modifications and tender withdrawals, if any, the presence of the requisite Tender Surety and such other details as the Employer, at his discretion, may consider appropriate. No tender shall be rejected at the tender opening except for late tenders.
- 20.4 The Employer shall prepare minutes of the tender opening including the information disclosed to those present.
- 20.5 Tenders not opened and read out at a tender opening shall not be considered further for evaluation, irrespective of the circumstances.

21 Process to be Confidential

- 21.1 After the public opening of tenders, information relating to the examination, clarification, evaluation and comparisons of tenders and recommendations concerning the award of Contract shall not be disclosed to tenderers or other persons not officially concerned with such process until the award of Contract is announced.
- 21.2 Any effort by a tenderer to influence the Employer in the process of examination, evaluation and comparison of tenders and decisions concerning award of Contract may result in the rejection of the tenderer's tender.

22 Clarification of Tenders

- 22.1 To assist in the examination, evaluation and comparison of tenders, the Employer may ask tenderers individually for clarification of their tenders, including breakdown of unit prices. The request for clarification and the response shall be in writing or by cable, facsimile or telex, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the employer during the evaluation of the tenders in accordance with clause 24.
- 22.2 No Tenderer shall contact the Employer on any matter relating to his tender from the time of the tender opening to the time the Contract is awarded. If the tenderer wishes to bring additional information to the notice of the Employer, he shall do so in writing.

23 Determination of Responsiveness

- 23.1 Prior to the detailed evaluation of tenders, the Employer will determine whether each tender is substantially responsive to the requirements of the tender documents.
- 23.2 For the purpose of this clause, a substantially responsive tender is one which conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation and has a valid bank guarantee. A material deviation or reservation is one which affects in any substantial way the scope, quality, completion timing or administration of the Works to be undertaken by the tenderer under the Contract, or which limits in any substantial way, inconsistent with the tender documents, the Employer's rights or the tenderers obligations under the Contract and the rectification of which would affect unfairly the competitive position of other tenderers who have presented substantially responsive tenders.
- 23.3 Each price or unit rate inserted in the Bills of Quantities shall be a realistic estimate of the cost of completing the works described under the particular item including allowance for overheads, profits and the like. Should a tender be seriously unbalanced in relation to the Employer's estimate of the works to be performed under any item or groups of items, the tender shall be deemed not responsive.

- 23.4 A tender determined to be not substantially responsive will be rejected by the Employer and may not subsequently be made responsive by the tenderer by correction of the non-conforming deviation or reservation.

24 Correction of Errors

Tenders determined to be substantially responsive shall be checked by the Employer for any arithmetic errors in the computations and summations. Errors will be corrected by the Employer as follows:

- (a) Where there is a discrepancy between the amount in figures and the amount in words, the amount in words will govern.
- (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will prevail, unless in the opinion of the Employer, there is an obvious typographical error, in which case adjustment will be made to the entry containing that error.
- (c) The amount stated in the tender will be adjusted in accordance with the above procedure for the correction of errors and, with concurrence of the tenderer, shall be considered as binding upon the tenderer. If the tenderer does not accept the corrected amount, the tender may be rejected and the Tender Security may be forfeited in accordance with clause 13.

25 Conversion to Single Currency

- 25.1 For compensation of tenders, the tender price shall first be broken down into the respective amounts payable in various currencies by using the selling rate or rates of the Central Bank of Kenya ruling on the date twenty eight (28) days before the final date for the submission of tenders.
- 25.2 The Employer will convert the amounts in various currencies in which the tender is payable (excluding provisional sums but including Dayworks where priced competitively) to Kenya Shillings at the selling rates stated in clause 25.1.

26 Evaluation and Comparison of Tenders

- 26.1 The Employer will evaluate only tenders determined to be substantially responsive to the requirements of the tender documents in accordance with clause 23.
- 26.2 In evaluating tenders, the Employer will determine for each tender the evaluated tender price by adjusting the tender price as follows:

- (a) Making any correction for errors pursuant to clause 24.
 - (b) Excluding Provisional Sums and provision, if any, for Contingencies in the Bills of Quantities, but including Day works where priced competitively.
- 26.3 The Employer reserves the right to accept any variation, deviation or alternative offer. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the tender documents or otherwise result in the accrual of unsolicited benefits to the Employer, shall not be taken into account in tender evaluation.
- 26.4 Price adjustment provisions in the Conditions of Contract applied over the period of execution of the Contract shall not be taken into account in tender evaluation.
- 26.5 If the lowest evaluated tender is seriously unbalanced or front loaded in relation to the Employer's estimate of the items of work to be performed under the Contract, the Employer may require the tenderer to produce detailed price analyses for any or all items of the Bills of Quantities, to demonstrate the relationship between those prices, proposed construction methods and schedules. After evaluation of the price analyses, the Employer may require that the amount of the Performance Security set forth in clause 29 be increased at the expense of the successful tenderer to a level sufficient to protect the Employer against financial loss in the event of subsequent default of the successful tenderer under the Contract.
- 26.6 Firms incorporated in Kenya where indigenous Kenyans own 51% or more of the share capital shall be allowed a 10% preferential bias provided that they do not sub-contract work valued at more than 50% of the Contract Price excluding Provisional Sums to a non-indigenous sub-contractor.

AWARD OF CONTRACT

27 Award

- 27.1 Subject to clause 27.2, the Employer will award the Contract to the tenderer whose tender is determined to be substantially responsive to the tender documents and who has offered the lowest evaluated tender price subject to possessing the capability and resources to effectively carry out the Contract Works.
- 27.2 The Employer reserves the right to accept or reject any tender, and to annual the tendering process and reject all tenders, at any time prior to award of Contract, without thereby incurring any liability to the affected tenderers or any obligation to inform the affected tenderers of the grounds for the Employer's action.

28 Notification of Award

- 28.1 Prior to the expiration of the period of tender validity prescribed by the Employer, the Employer will notify the successful tenderer by cable, Telefax or telex and confirmed in writing by registered letter that his tender has been accepted. This letter (hereinafter and in all Contract documents called “Letter of Acceptance”) shall name the sum (hereinafter and in all Contract documents called “the Contract Price”) which the Employer will pay to the Contractor in consideration of the execution and completion of the Works as prescribed by the Contract.
- 28.2 Notification of award will constitute the formation of the Contract.
- 28.3 Upon the furnishing of a Performance Security by the successful tenderer, the unsuccessful tenderers will promptly be notified that their tenders have been unsuccessful.
- 28.4 Within twenty eight [28] days of receipt of the form of Contract Agreement from the Employer, the successful tenderer shall sign the form and return it to the Employer together with the required Performance Security.

29 Performance Guarantee

- 29.1 Within twenty eight [28] days of receipt of the notification of award from the Employer, the successful tenderer shall furnish the Employer with a Performance Security in an amount stated in the Appendix to Instructions to Tenderers.
- 29.2 The Performance Security to be provided by the successful tenderer shall be an unconditional Bank Guarantee issued at the tenderer’s option by an established and a reputable Bank approved by the Employer and located in the Republic of Kenya and shall be divided into two elements namely, a performance security payable in foreign currencies (based upon the exchange rates determined in accordance with clause 35.4 of the Conditions of Contract) and a performance security payable in Kenya Shillings. The value of the two securities shall be in the same proportions of foreign and local currencies as requested in the form of foreign currency requirements.
- 29.3 Failure of the successful tenderer to lodge the required Performance Security shall constitute a breach of Contract and sufficient grounds for the annulment of the award and forfeiture of the Tender Security and any other remedy under the Contract the Employer may award the Contract to the next ranked tenderer.

30 Advance Payment

An advance payment, if approved by the Employer, shall be made under the Contract, if requested by the Contractor, in accordance with clause 33.1 of the Conditions of Contract. The Advance Payment Guarantee shall be denominated in the proportion and currencies named in the form of foreign currency requirements. For each currency, a separate guarantee shall be issued. The guarantee shall be issued by a bank located in the Republic of Kenya, or a foreign bank through a correspondent bank located in the Republic of Kenya, in either case subject to the approval of the Employer.

APPENDIX TO INSTRUCTIONS TO TENDERERS

1. CLAUSE 2.1

Change to read “This invitation Tender is open to all pre-qualified Tenderers.

2. OMIT

Clauses 4.3, 5.1 (d), (f), (i), (j), 10.3, 10.4, 11.2, 11.3, 11.4, 15, 25, 26.6, 30

3. ADD TO CLAUSE 5.1 (h)

Form of agreement refers to the latest edition of the Kenya Association of Building Civil Engineering Contractors (KABCEC) document

4. ADD TO CLAUSE 13.1

Amount of tender surety will be **2% (two percent) of the Tender Sum**

5. ADD TO CLAUSE 13.2

Tender security to be valid for 150 days from Tender opening date.

6. MODIFY CLAUSE 16 & 17

Only one Tender document (The ‘ORIGINAL’) shall be submitted.

7. MODIFY TO CLAUSE 28.4

Change to read “Within 7 days

8. MODIFY TO CLAUSE 29.1

Change to read “Within 7 days

Amount of performance security will be five per cent (5 %) of Tender Sum.

9. ADD TO CLAUSE 29.2

Performance security shall not be divided in two elements and shall be payable in Kenya Shillings Only.

10. ADD TO CLAUSE 24

- (i) In the event of a discrepancy between the tender amount as stated in the form of tender and the corrected tender figure in the main summary of the bills of quantities the amount as stated in the form of tender shall prevail.
- (ii) The correction factor shall be computed by expressing the difference between the amount and the corrected tender sum as a percentage of the corrected sub-contact works. (i.e. corrected tender sum less PC and provisional sums)
- iii) The Error correction factor shall be applied to all sub-contract works (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuation of variations.

11. ADD TO CLAUSE 26

The evaluation criteria as detailed on pages (A-17 to A-24) of this clause shall be applied.

TENDER EVALUATION CRITERIA

After tender opening, the tenders will be evaluated in 3 stages, namely:

1. Determination of Responsiveness
2. Detailed Technical Examination
3. Financial Evaluation.

STAGE 1- DETERMINATION OF RESPONSIVENESS

A) PRELIMINARY EXAMINATION

This stage of evaluation shall involve examination of the pre-qualification conditions as set out in the Tender Advertisement Notice or Letter of Invitation to Tender and any other conditions stated in the bid document.

These conditions shall include the following:

- i) Category of Registration with National Construction Authority in the relevant class.
- ii) Class of Licenses with the relevant statutory bodies e.g. Energy Regulatory Commission, Local Authorities, Water Management Boards etc.
- iii) Proof of payment for tender document
- iv) Provision of Bid Security
- v) Duly filled Form of Tender
- vi) Any other conditions included in the advertisement notice/Invitation letter.

Note:

The bid security shall be in accordance with clauses 13 and 23.2 of Instruction to Tenderers which states as follows:

- **Clause 13.1** of Instruction to Tenderers, "the tenderers shall furnish as part of his tenders a tender surety in the amount stated in the tender document in the Appendix to Instructions to Tenderers".
- **Clause 13.2** of Instruction to Tenderers, "the unconditional Tender surety shall be in Kenya shillings and be in form of a certified cheque, bank draft, an irrevocable letter of credit or a guarantee from a reputable Bank approved by the employer located in the Republic of Kenya. The format of the surety shall be in accordance with the sample form included in the tender documents and the tender surety shall be valid for 150 days from the date of tender opening".
- **Clause 23.2** of Instruction to Tenderers: "For the purposes of this clause, a substantially responsive tender is one which conforms to all terms and condition and specifications of the tender document without material deviation or reservation and has a valid Bank guarantee".

The employer may seek further clarification/confirmation if necessary to confirm authenticity/compliance of any condition of the tender.

The tenderers who do not satisfy any of the above requirements shall be considered Non-Responsive and their tenders will not be evaluated further.

B) COMPLETENESS OF TENDER DOCUMENT

The tender document shall be examined based on clause 2.2 of the Instruction to Tenderers which states as follows:

In accordance with clause 2.2 of Instruction to Tenderers, the tenderers will be required to provide evidence for eligibility of the award of the tender by satisfying the employer of their eligibility under sub clause 2.1 of Instruction to Tenderers and adequacy of resources to effectively carry out the subject contract. The tenderers shall be required to fill the Standards Forms provided for the purposes of providing the required information. The tenderers may also attach the required information if they so desire.

The award of points for the **STANDARD FORMS** considered in this section shall be as shown below

<u>PARAMETER</u>	<u>MAXIMUM POINTS</u>
(i) Statement of Compliance -----	3
(ii) Tender Questionnaire -----	5
(iii) Confidential Business questionnaire	5
(iii) Key personnel -----	10
(iv) Contract Completed in the last Five (5) years -----	15
(v) Schedules of on-going projects -----	10
(vi) Schedules of contractors equipment -----	10
(vii) Audited Financial Report for the last 3 years-----	10
(viii) Evidence of Financial Resources -----	10
(ix) Name, Address and Telephone of Banks (Contractor to provide) -----	5
(x) Litigation History-----	2
(xi) Sanctity of the tender document as in accordance with clause 5 of instruction to tenderer -----	10
TOTAL	<u>100</u>

The detailed scoring plan shall be as shown in table 1 below: -

TABLE 1

Item	Description	Point Scored	Max. Point	
i	Statement of Compliance Signed and stamped ----- 3 Signed but not stamped or vice versa ----- 2 Not signed nor stamped ----- 0		3	
ii	Tender Questionnaire Form Completely filled ----- 5 Partially filled ----- 3 Not filled -----0		5	
iii	Confidential Business Questionnaire Form. Completely filled ----- 5 Partially filled ----- 3 Not filled ----- 0		5	
iv	Key Personnel (Attach evidence)		15	
	Director of the firm o Holder of degree or diploma in relevant Engineering field-----5 o Holder of certificate in relevant Engineering field-----3 o Holder of trade test certificate in relevant Engineering field--2 o No relevant certificate -----0			5
	At least 1No. degree/diploma of key personnel in relevant Engineering field o With over 10 years relevant experience -----4 o With over 5 years relevant experience ----- 3 o With under 5 years relevant experience ----- 1			4
	At least 1No certificate holder of key personnel in relevant Engineering field o With over 10 years relevant experience ----- 3 o With over 5 years relevant experience ----- 2 o With under 5 years relevant experience -----1			3

Item	Description	Point Scored	Max. Point	
	At least 2No artisan (trade test certificate in relevant Engineering field) <ul style="list-style-type: none"> o Artisan with over 10 years relevant experience ----- ~ 2 o Artisan with under 10 years relevant experience ----- ~ 1 Non skilled worker with over 10 years relevant experience ---- 1 		4	
v	Contract completed in the last five (5) years (A max of 5No.Projects) <ul style="list-style-type: none"> o Project of similar nature, complexity and magnitude ----- 3 o Project of similar nature but of lower value than the one in consideration----- 2 o No completed project of similar nature ----- 0 		15	
vi	On-going projects (A max of 5No.Projects) <ul style="list-style-type: none"> o Project of similar nature, complexity and magnitude ----- 2 o Project of similar nature but of lower value than the one in consideration ----- 1 o No ongoing project of similar nature ~ -----0 		10	
vii	Schedules of contractors equipment and transport (proof or evidence of ownership) <ul style="list-style-type: none"> o Means of transport (Vehicle) ----- 4 o No means of transport ----- 0 		4	10
	For each specific equipment required in the installation of the work being tendered for. (Maximum No. of equipment to be considered – 3No.) ----- -- 2		6	
viii	Financial report		10	
	Audited financial report (last three (3) years) <ul style="list-style-type: none"> o Turn over greater or equal to 5 times the cost of the project -- 10 o Turn over greater or equal to 3 times the cost of the project -- ~ 6 o Turn over greater or equal to the cost of the project ----- -- 4 o Turn over below the cost of the project ----- 2 			

Item	Description	Point Scored	Max. Point
ix	Evidence of Financial Resources (cash in hand, lines of credit, over draft facility etc) <ul style="list-style-type: none"> ○ Has financial resources equal or above the cost of the project- - 10 ○ Has financial resources below the cost of the project ----- -----5 ○ Has not indicated sources of financial resources ----- -----0 		10
x	Name, Address and Telephone of Banks (Contractor to provide) <ul style="list-style-type: none"> ○ Provided ----- 5 ○ Not provided ----- 0 		5
xi	Litigation History <ul style="list-style-type: none"> ○ Filled -----2 ○ Not filled -----0 		2
xii	Sanctity of the tender document <ul style="list-style-type: none"> ○ Having the document intact (not tampered with in any way) -----10 ○ Having mutilated or modified the tender document----- -----0 		10
	TOTAL		100

Any bidder who scores 60 points and above shall be considered for further evaluation

STAGE 2 - TECHNICAL EVALUATION

A) COMPLIANCE WITH TECHNICAL SPECIFICATIONS

In this section, the bid will be analyzed to determine compliance with General and Particular technical specifications for the works as indicated in the tender document.

The tenderer shall fill in the Technical Schedule as specified in the tender document for Equipment and Items indicating the Country of Origin, Model/Make/Manufacturer of the Item/Equipment they propose to supply.

Where the Equipment proposed by the tenderer differs with the models specified in the tender document, it is mandatory that the brochures/catalogues of the same be submitted with the tender document highlighting the catalogues Numbers of the proposed items. Such brochures/catalogues should indicate comprehensive relevant data of the proposed equipment/items which should include but not limited to the following:

- a) Standards of manufacture
- b) Performance ratings/characteristics
- c) Material of manufacture
- d) Electrical power ratings and
- e) Any other necessary requirements (Specify)

Following the above analyses, where the proposed equipment are found not to satisfy the specifications, the tender will be deemed Non – Responsive and will not be evaluated further.

B) DETAILED TECHNICAL EXAMINATION

In this section, the information provided in Schedule of Unit Rates and Technical Schedule will be analyzed and points awarded as shown below.

PARAMETER	MAXIMUM POINTS
(i) Tender rates-----	30
(ii) Technical Schedule ~-----	<u>50</u>
TOTAL	<u>80</u>

The detailed scoring plan shall be as shown in table 2 below:

TABLE 2

Item	Description	Score	Max. score
i	<p>Tender rates (The average of tender sums of the bidders less PCs Sums and contingency including the engineers estimate shall be worked out. The deviation of bidders tender Sum bidders less PCs Sums and contingency from the average shall then be worked out as a percentage of the average and score allocated as follow:-)</p> <ul style="list-style-type: none"> ○ Deviation of between 0% to 5% ----- 30 ○ Deviation of between 5% to 10% ----- 25 ○ Deviation of between 10% to 15% -----20 ○ Deviation of between 15% to 20% -----15 ○ Deviation of between 20% to 25% ----- 10 ○ Deviation of between 25% to 30% ----- 5 ○ Deviation of above 30% ----- 2 		30
ii	<p>Technical schedule</p> <ul style="list-style-type: none"> ○ Relevant Manufacturer Brochures for items in the technical schedule with equipments to be supplied highlighted and meets specification (Where alternative are to supplied----- 50 or ○ Completely filled Technical Schedule indicating Brand, Model/ Country of origin as per specification ----- 50 ○ Relevant Manufacturer Brochures for items in the technical schedule with equipments to be supplied not highlighted but within range of those specified and meets specifications ----- 40 or ○ Completely filled Technical Schedule indicating items as specified in the tender but with about 75% of technical data provided ----- 40 ○ Relevant Manufacturer Brochures for less than 50% of items in the technical schedule with equipments to be supplied highlighted and meets specifications----- 30 or ○ About 50% of Technical Schedule filled indicating Brand, Model/Country of origin for the items considered as specified in the tender -----30 <p>No technical data provided, either in form of brochures or filling of Technical Schedule. ----- 0</p>		50
	TOTAL		80

For a bidder to deemed technically responsive they must score 50 points and above based on the above scoring plan. Any tenderer whose tender figure is deemed to be unreasonably too high or unreasonably too low shall not be included during the tabulation of the averages of the tender sum.

STAGE 3 - FINANCIAL EVALUATION

The evaluation shall be in two sections :

1. Preliminary examinations and
2. Tender Sum Comparisons

1. PRELIMINARY EXAMINATIONS

The preliminary examination in the Financial Evaluation shall be in accordance with clause 26 of Instruction to Tenderers.

The parameter to be considered under this section includes the following:

- a) Arithmetic errors

(A) ARITHMETIC ERRORS

The bid shall be checked for arithmetic errors based on the rates and the total sums indicated in the bills of quantities.

Confirmation shall be sought in writing from the tenderers whose tender sums will be determined to have a significant arithmetic error to their disadvantage, to confirm whether they stand by their tender sums. The error shall be treated as per **clause 24 of Instructions to Tenderers**.

Non compliance with the above shall lead to **automatic disqualification from further evaluation**.

Discount if any shall be treated as an error in pursuant to **clause 26.3** of Instructions to Tenderers

2. TENDER SUM COMPARISONS

The evaluation team shall compare the prices offered by the tenderers and the financial scores (Fs) will be determined using the formulae bellow. The financial score will be allocated a maximum of 20%.

$$Fs = 20 \times Fm/F$$

Where Fs is the financial score, Fm is the lowest priced responsive financial bid and F is the price of the bid under consideration

CONCLUSION

COMBINATION OF TECHNICAL AND FINANCIAL SCORE

The evaluation team shall combine Technical and Financial Score as below:

$$\text{Technical score (Ts) + Financial score (Fs) = 80\% + 20\%}$$

RECOMMENDATION

The combined technical and financial score shall be determined and the employer shall recommend for award of the **Tender** to the firm achieving the highest combined technical and financial scores.

SECTION B:

CONDITIONS OF CONTRACT (MAIN WORKS)

CONDITIONS OF CONTRACT (MAIN WORKS)

CONTENTS

<u>CLAUSE No.</u>	<u>PAGE</u>
1. DEFINITIONS.....	B-2
2. CONTRACT DOCUMENTS.....	B-3
3. EMPLOYER'S REPRESENTATIVE'S DECISIONS.....	B-4
4. WORKS, LANGUAGE AND LAW OF CONTRACT.....	B-4
5. SAFETY, TEMPORARY WORKS AND DISCOVERIES.....	B-4
6. WORK PROGRAMME AND SUB-CONTRACTING.....	B-4
7. THE SITE.....	B-4
8. INSTRUCTIONS.....	B-5
9. EXTENSION OF COMPLETION DATE.....	B-5
10. MANAGEMENT MEETINGS.....	B-6
11. DEFECTS.....	B-6
12. BILLS OF QUANTITIES/SCHEDULE OF RATES.....	B-7
13. VARIATIONS.....	B-7
14. PAYMENT CERTIFICATES AND FINAL ACCOUNT	B-8
15. INSURANCES	B-9
16. LIQUIDATED DAMAGES.....	B-9
17. COMPLETION AND TAKING OVER.....	B-9
18. TERMINATION.....	B-9
19. PAYMENT UPON TERMINATION.....	B-10
20. CORRUPT GIFTS AND PAYMENTS OF COMMISSION.....	B-10
21. SETTLEMENT OF DISPUTES.....	B-11
22. APPENDIX TO CONDITIONS OF CONTRACT	B-12

CONDITIONS OF CONTRACT (MAIN WORKS)

1. Definitions

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

“Bills of Quantities” means the priced and completed Bill of Quantities forming part of the tender [where applicable].

“Schedule of Rates” means the priced Schedule of Rates forming part of the tender [where applicable].

“The Completion Date” means the date of completion of the Works as certified by the Employer’s Representative.

“The Contract” means the agreement entered into by the Employer and the Contractor as recorded in the Agreement Form and signed by the parties.

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

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

“The Contract Price” is the price stated in the Letter of Acceptance.

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

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

“The Defects Liability Certificate” is the certificate issued by Employer’s Representative upon correction of defects by the Contractor.

“The Defects Liability Period” is the period named in the Appendix to Conditions of Contract and calculated from the Completion Date.

“Drawings” include calculations and other information provided or approved by the Employer’s Representative for the execution of the Contract.

“Employer” includes Central or Local Government administration, Universities, Public Institutions and Corporations and is the party who employs the Contractor to carry out the Works.

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

“Site” means the place or places where the permanent Works are to be carried out including workshops where the same is being prepared.

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

“Employer’s Representative” is the person appointed by the Employer and notified to the Contractor for the purpose of supervision of the Works.

“Specification” means the Specification of the Works included in the Contract.

“Start Date” is the date when the Contractor shall commence execution of the Works.

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

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

“ A Variation” is an instruction given by the Employer’s Representative which varies the Works.

“The Works” are what the Contract requires the Contractor to construct, install, and turnover to the Employer.

2. Contract Documents

2.1 The following documents shall constitute the Contract documents and shall be interpreted in the following order of priority;

- (1) Agreement,
- (2) Letter of Acceptance,
- (3) Contractor’s Tender,
- (4) Conditions of Contract,
- (5) Specifications,
- (6) Drawings,
- (7) Bills of Quantities or Schedule of Rates [whichever is applicable]

3. Employer's Representative's Decisions

3.1 Except where otherwise specifically stated, the Employer's Representative will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

4. Works, Language and Law of Contract

4.1 The Contractor shall construct and install the Works in accordance with the Contract documents. The Works may commence on the Start Date and shall be carried out in accordance with the Programme submitted by the Contractor, as updated with the approval of the Employer's Representative, and complete them by the Intended Completion Date.

4.2 The ruling language of the Contract shall be English language and the law governing the Contract shall be the law of the Republic of Kenya.

5. Safety, Temporary works and Discoveries

5.1 The Contractor shall be responsible for design of temporary works and shall obtain approval of third parties to the design of the temporary works where required.

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

5.3 Any thing of historical or other interest or significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Employer's Representative of such discoveries and carry out the Employer's Representative's instructions for dealing with them.

6. Work Programme and Sub-contracting

6.1 Within seven days after Site possession date, the Contractor shall submit to the Employer's Representative for approval a programme showing the general methods, arrangements, order and timing for all the activities in the Works.

6.2 The Contractor may sub-contract the Works (but only to a maximum of 25 percent of the Contract Price) with the approval of the Employer's Representative. However, he shall not assign the Contract without the approval of the Employer in writing. Sub-contracting shall not alter the Contractor's obligations.

7. The site

- 7.1 The Employer shall give possession of all parts of the Site to the Contractor.
- 7.2 The Contractor shall allow the Employer's Representative and any other person authorised by the Employer's Representative, access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

8. Instructions

- 8.1 The Contractor shall carry out all instructions of the Employer's Representative which are in accordance with the Contract.

9. Extension of Completion Date

- 9.1 The Employer's Representative shall extend the Completion Date if an occurrence arises which makes it impossible for completion to be achieved by the Intended Completion Date. The Employer's Representative shall decide whether and by how much to extend the Completion Date.
- 9.2 For the purposes of this Clause, the following occurrences shall be valid for consideration;

Delay by:-

- (a) force majeure, or
- (b) reason of any exceptionally adverse weather conditions, or
- (c) reason of civil commotion, strike or lockout affecting any of the trades employed upon the Works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the Works, or
- (d) reason of the Employer's Representative's instructions issued under these Conditions, or
- (e) reason of the contractor not having received in due time necessary instructions, drawings, details or levels from the Employer's Representative for which he specifically applied in writing on a date which having regard to the date for Completion stated in the appendix to these Conditions or to any extension of time then fixed under this Clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, or

- (f) delay on the part of artists, tradesmen or others engaged by the Employer in executing work not forming part of this Contract, or
- (g) reason of delay by statutory or other services providers or similar bodies engaged directly by the Employer, or
- (h) reason of opening up for inspection of any Work covered up or of the testing or any of the Work, materials or goods in accordance with these conditions unless the inspection or test showed that the Work, materials or goods were not in accordance with this Contract, or
- (i) reason of delay in appointing a replacement Employer's Representative, or
- (j) reason of delay caused by the late supply of goods or materials or in executing Work for which the Employer or his agents are contractually obliged to supply or to execute as the case may be, or
- (k) delay in receiving possession of or access to the Site.

10. Management Meetings

- 10.1 A Contract management meeting shall be held regularly and attended by the Employer's Representative and the Contractor. Its business shall be to review the plans for the remaining Work. The Employer's Representative shall record the business of management meetings and provide copies of the record to those attending the meeting and the Employer. The responsibility of the parties for actions to be taken shall be decided by the Employer's Representative either at the management meeting or after the management meeting and stated in writing to all who attend the meeting.
- 10.2 Communication between parties shall be effective only when in writing.

11. Defects

- 11.1 The Employer's Representative shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor's responsibilities. The Employer's Representative may instruct the Contractor to search for a defect and to uncover and test any Work that the Employer's Representative considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor. However, if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.

- 11.2 The Employer's Representative shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract.
- 11.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Employer's Representative's notice. If the Contractor has not corrected a defect within the time specified in the Employer's Representative's notice, the Employer's Representative will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

12. Bills of Quantities/Schedule of Rates

- 12.1 The Bills of Quantities/Schedule of Rates shall contain items for the construction, installation, testing and commissioning of the Work to be done by the Contractor. The Contractor will be paid for the quantity of the Work done at the rates in the Bills of Quantities/Schedule of Rates for each item. Items against which no rate is entered by the Tenderer will not be paid for when executed and shall be deemed covered by the rates for other items in the Bills of Quantities/Schedule of Rates.
- 12.2 Where Bills of Quantities do not form part of the Contract, the Contract Price shall be a lump sum (which shall be deemed to have been based on the rates in the Schedule of Rates forming part of the tender) and shall be subject to re-measurement after each stage.

13. Variations

- 13.1 The Contractor shall provide the Employer's Representative with a quotation for carrying out the variations when requested to do so. The Employer's Representative shall assess the quotation and shall obtain the necessary authority from the Employer before the variation is ordered.
- 13.2 If the Work in the variation corresponds with an item description in the Bill of Quantities/Schedule of Rates, the rate in the Bill of Quantities/Schedule of Rates shall be used to calculate the value of the variation. If the nature of the Work in the variation does not correspond with items in the Bill of Quantities/Schedule of Rates, the quotation by the Contractor shall be in the form of new rates for the relevant items of Work.
- 13.3 If the Contractor's quotation is unreasonable, the Employer's Representative may order the variation and make a change to the Contract Price, which shall be based on the Employer's Representative's own forecast of the effects of the variation on the Contractor's costs.

14. Payment Certificates and Final Account

- 14.1 The Contractor shall be paid after each of the following stages of Work listed herebelow (subject to re-measurement by the Employer's Representative of the Work done in each stage before payment is made). In case of lump-sum Contracts, the valuation for each stage shall be based on the quantities so obtained in the re-measurement and the rates in the Schedule of Rates.
- (i) Advance payment **NIL** (*percent of Contract Price, [after Contract execution] to be inserted by the Employer*).
 - (ii) First stage (*define stage*) **AS PER PROGRESS**
 - (iii) Second stage (*define stage*) **AS PER PROGRESS**
 - (iv) Third stage (*define stage*) **AS PER PROGRESS**
 - (v) After defects liability period.
- 14.2 Upon deciding that Works included in a particular stage are complete, the Contractor shall submit to the Employer's Representative his application for payment. The Employer's Representative shall check, adjust if necessary and certify the amount to be paid to the Contractor within 21 days of receipt of the Contractor's application. The Employer shall pay the Contractor the amounts so certified within 30 days of the date of issue of each Interim Certificate.
- 14.3 The Contractor shall supply the Employer's Representative with a detailed final account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer's Representative shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer's Representative shall issue within 21 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Employer's Representative shall decide on the amount payable to the Contractor and issue a Final Payment Certificate. The Employer shall pay the Contractor the amount so certified within 60 days of the issue of the Final Payment Certificate.
- 14.4 If the period laid down for payment to the Contractor upon each of the Employer's Representative's Certificate by the Employer has been exceeded, the Contractor shall be entitled to claim simple interest calculated pro-rata on the basis of the number of days delayed at the

Central Bank of Kenya's average base lending rate prevailing on the first day the payment becomes overdue. The Contractor will be required to notify the Employer within 15 days of receipt of delayed payments of his intentions to claim interest.

15. Insurance

15.1 The Contractor shall be responsible for and shall take out appropriate cover against, among other risks, personal injury; loss of or damage to the Works, materials and plant; and loss of or damage to property.

16. Liquidated Damages

16.1 The Contractor shall pay liquidated damages to the Employer at the rate 0.001 per cent of the Contract price per day for each day that the actual Completion Date is later than the Intended Completion Date except in the case of any of the occurrences listed under Clause 9.2. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

17. Completion and Taking Over

17.1 Upon deciding that the Work is complete the Contractor shall request the Employer's Representative to issue a Certificate of Completion of the Works, upon deciding that the Work is completed.

The Employer shall take over the Site and the Works within seven days of the Employer's Representative issuing a Certificate of Completion.

18. Termination

18.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. These fundamental breaches of Contract shall include, but shall not be limited to, the following;

- (a) the Contractor stops Work for 30 days continuously without reasonable cause or authority from the Employer's Representative;
- (b) the Contractor is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (c) a payment certified by the Employer's Representative is not paid by the Employer to the Contractor within 30 days after the expiry of the payment periods stated in Sub-Clauses 14.2 and 14.3 hereabove.
- (d) the Employer's Representative gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time.

18.2 If the Contract is terminated, the Contractor shall stop Work immediately, and leave the Site as soon as reasonably possible. The Employer's Representative shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

19. Payment Upon Termination

19.1 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on Site, plant, equipment and temporary works.

19.2 The Contractor shall, during the execution or after the completion of the Works under this Clause, remove from the Site as and when required within such reasonable time as the Employer's Representative may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to him, and in default thereof, the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.

19.3 Until after completion of the Works under this Clause, the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts therefore the Employer's Representative shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract, the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

20. Corrupt Gifts and Payments of Commission

20.1 The Contractor shall not:

- (a) Offer or give or agree to give to any person in the service of the Employer any gifts or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract with the Employer or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract with the Employer.
- (b) 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 Laws of Kenya.

21. Settlement of Disputes

21.1 Any dispute arising out of the Contract which cannot be amicably settled between the parties shall be referred by either party to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed by the chairman of the Chartered Institute of Arbitrators, Kenya branch, on the request of the applying party.

APPENDIX TO CONDITIONS OF CONTRACT

THE EMPLOYER IS

Name: The Principal, Garissa University College,
P.O. Box 1810-70100
GARISSA

Name of Employer's Representative: Deputy Principal (FAP), Garissa University College,
Address: P.O. Box 1810-70100, Garissa

The name (and identification number) of the Contract is **Proposed Construction of Perimeter Wall, 4No. Gates, 4No. Sentry Boxes, 2No. Waiting Bays, Cabro Paving, 2No. Watch Towers, 3No. Twin Toilets & Water Reticulation and Installation of Security System at Garissa University College at Garissa Town. - JOB NO. GUC/01/2016-2017**

**The Works Consist of
Construction of Perimeter Wall, 4No. Gates, 4No. Sentry Boxes, 2No. Waiting Bays, Cabro Paving, 2No. Watch Towers, 3No. Twin Toilets & Water Reticulation and Installation of Security System at Garissa University College at Garissa Town.
- Job No. GUC/01/2016-2017**

The Start date shall be as stated in the **Letter of Acceptance**.

The Intended contract period for the whole of the Works shall be as stated in the **Letter of Acceptance**.

The following documents also form part of the Contract: **Only as listed in Clause 2) i.e**

- (a) **Agreement** - The latest agreement and conditions of subcontract for building works by the **Kenya Association of Building and Civil Engineering Contractors (KABCEC)** signed between the main contractor and the subcontractor.
- (b) **Letter of acceptance** – letter addressed to the main contractor by the project manager instructing the main contractor to enter into the sub contractor agreement with the nominated subcontractor.
- (c) **Contractors tender** – the completed tendering document submitted by the subcontractor to the employer.
- (d) **Conditions of contract** – refers to the conditions of contract in the main works and conditions of subcontract as described in the subcontract agreement (**KABCEC**).
- (e) **Specifications** – specifications of subcontract works as described in the document.
- (f) **Bills of Quantities or schedule of Rates** (Whichever is applicable) – as described in this document.
- (g) **Drawings** - include calculations and other information provided or approved by the Employer's Representative for the execution of the Contract.

The Site Possession Date shall be as stated in the **Letter of Acceptance**.

The Site is located in **WITHIN GARISSA TOWN**

The Defects Liability Period is **6 Months**

Amount of Tender Security is Kshs. **Two Percent (2%) of the Tender Sum**

The name and Address of the Employer's representative for the purposes of submission of tenders is **Principal, Garissa University College, P.O. Box 1810-70100, Garissa.**

The tender opening date and time is **as stated in the invitation to tender.**

The amount of performance security is **5% (five percent)** of the Contract Price in form of a Bank Guarantee.

Period of final measurement: **1 month from practical completion**

Liquidated and Ascertained damages: **At the rate of Kshs. 20,000.00 per week
Or part thereof**

Prime cost sums for which the: **N/A**
Contractor desires to tender

Period of honoring certificate:	30 days
Percentage of certified value retained:	10%
Limit of retention fund:	-

SECTION C

SUB-CONTRACT PRELIMINARIES

AND

GENERAL CONDITIONS

CONTRACT PRELIMINARIES AND GENERAL CONDITIONS

<u>CLAUSE</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1.01	Examination of Tender Documents	C-1
1.02	Discrepancies	C-1
1.03	Conditions of Contract Agreement	C-1
1.04	Payments	C-2
1.05	Definition of Terms	C-2
1.06	Site Location	C-3
1.07	Duration of contract	C-4
1.08	Scope of contract Works	C-4
1.09	Extent of the Contractor's Duties	C-4
1.10	Execution of the Works	C-4
1.11	Validity of Tender	C-5
1.12	Firm – Price Contract	C-5
1.13	Variation	C-5
1.14	Prime Cost and Provisional Sums	C-6
1.15	Bond	C-6
1.16	Government Legislation and Regulations	C-6
1.17	Import Duty and Value Added Tax	C-6
1.18	Insurance Company Fees	C-7
1.19	Provision of Services by the Main Contractor	C-7
1.20	Suppliers	C-8
1.21	Samples and Materials Generally	C-8
1.22	Administrative Procedure and Contractual Responsibility	C-8
1.23	Bills of Quantities	C-8
1.24	Contractor's Office in Kenya	C-9

1.25	Builders Work	C-9
1.26	Structural Provision for the Works	C-9
1.27	Position of Services, Plant, Equipment, Fittings and Apparatus	C-10
1.28	Checking of Work	C-10
1.29	Setting to Work and Regulating System	C-10
1.30	Identification of Plant and Components	C-11
1.31	Contract Drawings	C-11
1.32	Working Drawings	C-11
1.33	Record Drawings (As Installed) and Instructions	C-13
1.34	Maintenance Manual	C-14
1.35	Hand – Over	C-15
1.36	Painting	C-15
1.37	Spares	C-16
1.38	Testing and Inspection – Manufactured Plant	C-16
1.39	Testing and Inspection – Installation	C-16
1.40	Labour Camps	C-17
1.41	Storage of Materials	C-17
1.42	Initial Maintenance	C-17
1.43	Maintenance and Servicing after Completion of the Initial Maintenance	C-17
1.44	Trade Names	C-18
1.45	Water and Electricity for the Works	C-18
1.46	Protection	C-18
1.47	Defects After Completion	C-18
1.48	Damages for Delay	C-18
1.49	Clear Away on Completion	C-18

1.50	Final Account	C-19
1.51	Fair Wages	C-19
1.52	Supervision	C-19
1.53	Test Certificates	C-20
1.54	Labour	C-20
1.55	Discount to the Main Contractor	C-20
1.56	Guarantee	C-20
1.57	Direct Contracts	C-20
1.58	Attendance Upon the Tradesmen	C-20
1.59	Trade Union	C-20
1.60	Local and other Authorities notices and fees	C-21
1.61	Assignment or Subletting	C-21
1.62	Partial Completion	C-21
1.63	Temporary Works	C-22
1.64	Patent Rights	C-21
1.65	Mobilization And Demobilization	C-22
1.66	Extended Preliminaries	C-22
1.67	Supervision by Engineer and Site Meetings	C-23
1.68	Amendment to Scope of Contract Works	C-23
1.69	Contractors Obligation and Employers Obligation	C-23
1.70	Appendix to Sub-Contract preliminaries and General conditions	C-24

SECTION D

GENERAL MECHANICAL SPECIFICATIONS

SECTION C

GENERAL MECHANICAL SPECIFICATION

<u>CLAUSE</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
2.01	GENERAL	D-1
2.02	QUALITY OF MATERIALS	D-1
2.03	REGULATIONS AND STANDARDS	D-1
2.04	ELECTRICAL REQUIREMENTS	D-2
2.05	TRANSPORT AND STORAGE	D-2
2.06	SITE SUPERVISION	D-3
2.07	INSTALLATION	D-3
2.08	TESTING	D-3
2.09	COLOUR CODING	D-4
2.10	WELDING	D-5

SECTION C

GENERAL MECHANICAL SPECIFICATION

2.01 General

This section specifies the general requirement for plant, equipment and materials forming part of the Sub-contract Works and shall apply except where specifically stated elsewhere in the Specification or on the Contract Drawings.

1. 2.02 Quality of Materials

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

All products or materials not manufactured by the Sub-contractor shall be products of reputable manufacturers and so far as the provisions of the Specification is concerned shall be as if they had been manufactured by the Sub-contractor.

Materials and apparatus required for the complete installation as called for by the Specification and Contract Drawings shall be supplied by the Sub-contractor unless mention is made otherwise.

Materials and apparatus supplied by others for installation and connection by the Sub-contractor shall be carefully examined on receipt. Should any defects be noted, the Sub-contractor shall immediately notify the Engineer.

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

2.03 Regulations and Standards

The Sub-contract Works shall comply with the current editions of the following:

- a) The Kenya Government Regulations.
- b) The United Kingdom Institution of Electrical Engineers (IEE) Regulations for the Electrical Equipment of Buildings.
- a) The United Kingdom Chartered Institute of Building Services Engineers (CIBSE) Guides.

- d) British Standard and Codes of Practice as published by the British Standards Institution (BSI)
- e) The Local Council By-laws.
- f) The Electricity Supply Authority By-laws.
- g) Local Authority By-laws.
- h) The Kenya Building Code Regulations.
- i) The Kenya Bureau of Standards

2.04 **Electrical Requirements**

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

The supply power up to and including local isolators shall be provided and installed by the Electrical Sub-contractor. All other wiring and connections to equipment shall form part of this Sub-contract and be the responsibility of the Sub-contractor.

The Sub-contractor shall supply three copies of all schematic, cabling and wiring diagrams for the Engineer's approval.

The starting current of all electric motors and equipment shall not exceed the maximum permissible starting currents described in the Kenya Power and Lighting Company (KPLC) By-laws.

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

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

2.05 **Transport and Storage**

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

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

Adequate measures shall be taken by the Sub-contractor to ensure that plant and equipment do not suffer any deterioration during storage.

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

If, in the opinion of the Engineer any equipment has deteriorated or been damaged to such an extent that it is not suitable for installation, the Sub-contractor shall replace this equipment at his own cost.

2.06 Site Supervision

The Sub-contractor shall ensure that there is an English-speaking supervisor on the site at all times during normal working hours.

2.07 Installation

Installation of all special plant and equipment shall be carried out by the Sub-contractor under adequate supervision from skilled staff provided by the plant and equipment manufacturer or his appointed agent in accordance with the best standards of modern practice and to the relevant regulations and standards described under Clause 2.03 of this Section.

2.08 Testing

2.08.1 General

The Sub-contractor's attention is drawn to Part 'C' Clause 1.38 of the "Preliminaries and General Conditions".

2.08.2 Material Tests

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

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

The Sub-contractor shall prepare specimens and performance tests and analyses to demonstrate conformance of the various materials with the applicable standards.

If stock material, which has not been specially manufactured for the plant and equipment specified is used, then the Sub-contractor shall submit satisfactory evidence to the Engineer that such materials conform to the requirements stated herein in which case tests of material may be partially or completely waived. Certified mill test reports of plates, piping and other materials shall be deemed acceptable.

2.08.3 Manufactured Plant and Equipment – Work Tests

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

The Sub-contractor shall give two week's notice to the Engineer of the manufacturer's intention to carry out such tests and inspections.

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

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

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

2.08.4 Pressure Testing

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

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

The Sub-contractor shall prepare test certificates for signature by the Engineer and shall keep a progressive and up-to-date record of the section of the work that has been tested.

2.09 **Colour Coding**

Unless stated otherwise in the Particular Specification all pipework shall be colour coded in accordance with the latest edition of B.S 1710 and to the approval of the Engineer or Architect.

2.10 Welding

2.10.1 Preparation

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

2.10.2 Method

All welding shall be carried out by the electric arc processing using covered electrodes in accordance with B.S. 639.

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

2.10.3 Welding Code and Construction

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

a) Pipe Welding

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

b) General Welding

All welding of mild steel components other than pipework shall comply with the general requirements of B.S. 1856.

2.10.4 Welders Qualifications

Any welder employed on this Sub-contractor shall have passed the trade tests as laid down by the Government of Kenya.

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

Schedules

Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

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

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

Daywork Schedule

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

- (a) A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor shall be paid for work executed on a daywork basis.*
- (b) Nominal quantities for each item of daywork, to be priced by each Bidder at daywork rates as Bid. The rate to be entered by the Bidder against each basic daywork item should include the Contractor's profit, overheads, supervision, and other charges.*

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary priced Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the Special Conditions of Contract should state the manner in which they shall be used, and under whose authority (usually the Project Manager's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Employer to select such specialized contractors. To provide an element of competition among the bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

These Notes for Preparing a Bill of Quantities are intended only as information for the Employer or the person drafting the Bidding Documents. They should not be included in the final documents.

Schedules

PARTICULAR PRELIMINARIES

ITEM	DESCRIPTION	AMOUNT (Kshs).
A.	<p>FIRM PRICE CONTRACT</p> <p>This is a firm price contract and the Contractor must allow in his tendered rates for any increase in the cost of labor and/or materials during the currency of the contract.</p> <p>SCOPE OF CONTRACT</p> <p>The works to be carried out under this contract comprise</p> <p>PROPOSED CONSTRUCTION OF PERIMETER WALL, 4No. GATES, 4No. SENTRY BOXES, 2No. WAITING BAYS, CABRO PAVING, 2No. WATCH TOWERS, 3No. TWIN TOILETS & WATER RETICULATION AND INSTALLATION OF SECURITY SYSTEM</p>	
B.	<p>DESCRIPTION OF THE WORKS</p> <p>CONSTRUCTION TO COMPLETION OF A PERIMETER WALL, 4No. GATES, 4No. SENTRY BOXES, 2No. WAITING BAYS, CABRO PAVING, 2No. WATCH TOWERS, 3No. TWIN TOILETS & WATER RETICULATION AND INSTALLATION OF SECURITY SYSTEM</p>	
C.	<p>MEASUREMENTS</p> <p>In the event of any discrepancies arising between the Bills of Quantities and the actual works, the site measurements shall generally take precedence. However, such discrepancies between any contract documents shall immediately be referred to the PROJECT MANAGER in accordance with Clause 22 of the Conditions of Contract. The discrepancies shall then be treated as a variation and be dealt with in accordance with Clause 22 of the said Conditions.</p>	
D.	<p>LOCATION OF SITE</p> <p>The site for works is located within Garissa Town .The tenderer shall be deemed to have visited the site and familiarized himself with all site conditions prior to submission of tenders. No claims arising from the tenderers failure to do so will be entertained.</p>	
E.	<p style="text-align: center;">Carried to Collection</p>	

ITEM	DESCRIPTION	AMOUNT (Kshs).
	<p>SECTION NO. 1</p> <p>PRELIMINARIES BILL NO. 1</p> <p>PARTICULAR PRELIMINARIES AMENDMENTS TO TENDERING INSTRUCTIONS</p> <p>a) Clause 3.6 of the Instructions to Tenderers has been amended to read; Tenders shall remain valid for a period of one hundred and twenty (120) days from the date of Tender Opening" and not Sixty (60) days. All tenderers are advised to note this amendment when filling the Form of Tender.</p> <p>b) Clause 3,8 of the Instructions to Tenderers will hence be qualified and interpreted to mean; "Bid Bond/Tender Security., which must be from an established bank, shall remain valid for a period of One Hundred and Twenty (120) days from the date of Tender Opening, it is still Thirty (30) days beyond the Tender Validity Period.</p> <p>PRICING ITEMS OF PRELIMINARIES</p> <p>Prices SHALL BE INSERTED against items of preliminaries in the tenderers priced Bills of Quantities. Please note that failure to price any item of general and/or particular preliminaries will be construed to mean that the tenderer wishes to provide for that item free of charge.</p> <p>VALUE ADDED TAX;</p> <p>The contractor shall allow for addition of 16% Value Added Tax (V.A.T) at the Grand Summary page of these Bills of Quantities. Any omission in respect thereof shall be treated and corrected as an arithmetic error as per clause 5.7 of the instructions to Tenderers. Please note that from every Interim and the Final payment, 16% VAT shall be deducted and paid directly to the Commissioner of Value Added Tax (V.A.T),</p>	
	Carried to Collection	

ITEMS	DESCRIPTION	Kshs.
A.	<p>CLEARING AWAY</p> <p>The Contractor shall remove all temporary works, rubbish, debris and surplus materials from the site as they accumulate and upon completion of the works, remove and clear away all plant, equipment, rubbish, unused materials and stains and leave in a clean and tidy state to the reasonable satisfaction of the Project Manager.</p> <p>The whole of the works shall be delivered up clean, complete and in perfect condition in every respect to the satisfaction of the Project</p> <p>CLAIMS</p>	
B.	<p>It shall be a condition of this contract that upon it becoming reasonably apparent to the Contractor that he has incurred losses and/or expenses due to any of the contract conditions, or by any other reason whatsoever, he shall present such claim or intent to claim notice to the PROJECT MANAGER within the contract period. No claims shall be entertained upon the expiry of the said contract period.</p> <p>PAYMENTS</p>	
C.	<p>The tenderers attention is drawn to the fact that the GOVERNMENT MAY MAKE ADVANCE PAYMENTS</p> <p>PREVENTION OF ACCIDENT, DAMAGE OR LOSS</p>	
D.	<p>The Contractor is notified that these works are to be carried out on a restricted site where the client is going on with other normal activities. The Contractor is instructed to take reasonable care in the execution of the works as to prevent accidents, damage or loss and disruption of normal activities being carried out by the Client. The Contractor shall allow in his rates any expense he deems necessary by taking such care</p> <p>BID SECURITY</p> <p>The contractor shall provide a bid security duly signed, sealed and stamped from an approved Bank of required amount.</p>	
E.		

Item	DESCRIPTION	Kshs
A.	<p>WORKING CONDITIONS</p> <p>The Contractor shall allow in his rates for any interference that he may encounter in the course of execution of the works for the Client may in some cases ask the Contractor not to proceed with the works until some activities within the site are completed, as the facility will be operating as usual during the course of the contract.</p>	
B.	<p>OFFICE OF THE PROJECT MANAGER</p> <p>The site office mentioned in item A page GP/7of the General Preliminaries shall be type "B" as shown on the Ministry of Works Standard Detail. The contractor shall insure the office and furniture against fire, theft and Natural calamities and provide day and night security. He shall also provide and maintain adequate access and parking acceptable to the PROJECT MANAGER</p>	
C.	<p>PROJECT TEAM.</p> <p>Allow a Provisional Sum of Kenya shillings Twelve thousand (Kshs 12,000.00) only per month for mobile phone airtime for the use by Ministry of Public Works project team in the course of contract period.</p> <p>Include a percentage for the contractor's Administration and profit for the above.....C %)</p>	
D.	<p>SIGNBOARD</p> <p>Allow for providing, erecting, maintaining throughout the course of the Contract and afterwards clearing away a signboard as designed, specified and approved by the Project Manager.</p>	
E.	<p>LABOUR CAMPS</p> <p>The Contractor shall not be allowed to house labor on site. Allow for transporting workers to and from the site during the tenure of the contract.</p>	

Item	DESCRIPTION	Kshs
A.	<p>MATERIALS FROM DEMOLITIONS</p> <p>Any materials arising from demolitions and not re-used shall become the property of the government. The Contractor shall allow in his rates the cost of transporting the demolished materials to the County Works Office Garissa.</p> <p>PRICING RATES</p>	
B.	<p>The tenderer shall include for all costs in executing the whole of the works, including transport, replacing damaged items, fixing, all to comply with the said Conditions of Contract.</p> <p>SECURITY</p>	
C.	<p>The Contractor shall allow for providing adequate security for the works and the workers in the course of execution of this contract. No claim will be entertained from the Contractor for not maintaining adequate security for both the works and workers.</p> <p>URGENCY OF THE WORKS</p>	
D.	<p>The Contractor is notified that these "works are urgent" and should be completed within the period stated in these Particular Preliminaries. The Contractor shall allow in his rates for any costs he deems that he/she may incur by having to complete the works within</p> <p>PAYMENT FOR MATERIALS ON SITE</p>	
E.	<p>All materials for incorporation in the works must be stored on site Before payment is effected, unless specifically exempted by the Project Manager. This is to include materials of the Contractor, nominated sub-contractors and nominated suppliers.</p>	

Item	DESCRIPTION	Kshs
A.	<p>EXISTING SERVICES</p> <p>Prior to the commencement of any work, the Contractor is to ascertain from the relevant authority the exact position, depth and level of all existing services in the area and he/she shall make whatever provisions may be required by the authorities concerned for the support, maintenance and protection of such services.</p>	
B.	<p>PERFORMANCE BOND</p> <p>A bond of 5 % of the contract sum will be required. No payment on account for the works executed will be made to the contractor until he has submitted the Performance Bond to the Project Manager duly, sealed and stamped from an approved Bank.</p>	
C.	<p>TENDER DOCUMENTS</p> <p>Tender documents are as listed in Clause 2.1 of the Instruction to Tenderers Page 7</p>	
D.	<p>DELIVERY OF TENDER</p> <p>Tenders and all documents in connection therewith, as specified above must be delivered in the addressed envelope which should be properly sealed and deposited at the offices as specified in the letter accompanying these documents or as indicated in the advertisement.</p> <p>Tenders will be opened at the time specified in the letter accompanying these Tender Documents or as indicated in the advertisement. Tenders delivered/received later than the above time will not be opened.</p>	
	Carrier to Collection	

Item	DESCRIPTION	Kshs
A.	<p><u>PARTICULARS OF INSPECTION TO BE MADE IN APPENDIX TO CONTRACT AGREEMENT</u></p> <p>The following are the insertions to be made in the appendix to the Contract Agreement</p> <p>Period of Final Measurement</p> <p>Defects Liability Period</p> <p>Date for possession</p> <p>Date for Completion</p> <p>Liquidated and Ascertained Damages</p> <p>Period of Interim Certificates</p> <p>Period of Honoring Certificates</p> <p>Percentage of Certified Value Retained</p> <p>Limit of Retention Fund</p> <p>Bonds</p> <p>PROJECT MANAGEMENT EXPENSES</p> <p>Allow a sum of Kenya shillings One hundred and fifty thousand (Kshs. 150,000.00) for project management expenses including transport, air time and lunches to be used as directed by the project Management team or deducted in whole or in part as the case may</p> <p>Include a percentage for the contractor's Administration and profit for the above C %)</p>	<p>1 Month from Practical Completion</p> <p>6 Months from Practical Completion</p> <p>To be agreed with the Project Manager</p> <p>To be agreed with PM & Client</p> <p>at a rate of Kshs 20,000 Per week or part thereof</p> <p>Monthly</p> <p>30 Days</p> <p>10%</p> <p>5%</p> <p>The Bonds required shall be from Approved banks/Approved Insurance Company only</p> <p>NIL</p>
B.		
C.	Carried to collection	

Items	DESCRIPTION	Kshs
	<p><u>COLLECTIONS</u></p> <p>Brought forward prom page PP/1</p> <p>Brought forward prom page PP/2</p> <p>Brought forward prom page PP/3</p> <p>Brought forward prom page PP/4</p> <p>Brought forward prom page PP/5</p> <p>Brought forward prom page PP/5</p> <p>Brought forward prom page PP/6</p> <p>Brought forward prom page PP/7</p>	
	PARTICULAR PRELIMNARIES CARRIED TO SUMMARY	

GENERAL PRELIMINARIES

ITEM	DESCRIPTION	KSHS
A	<p style="text-align: center;">GENERAL PRELIMINARIES</p> <p>PRICING OF ITEMS OF PRELIMINARIES AND PREAMBLES</p> <p>Prices will be inserted against items of Preliminaries in the Contractor's priced Bills of Quantities and Specification.</p> <p>The Contractor shall be deemed to have included in his prices or rates for the various items in the Bills of Quantities or Specification for all costs involved in complying with all the requirements for the proper execution of the whole of the works in the Contract.</p> <p>ABBREVIATIONS</p> <p>Throughout these Bills, units of measurement and terms are abbreviated and shall be interpreted as follows:-</p> <p>CM. Shall mean cubic meter</p> <p>S M. Shall mean square meter</p> <p>LM. Shall mean linear meter</p> <p>MM. Shall mean millimeter</p> <p>Kg. Shall mean Kilogram</p> <p>No. Shall mean number</p> <p>Prs. Shall mean pairs</p> <p>B.S Shall mean the British Standard Specification Published by the British Standard Institution, 2 park Street, London W.I. England</p> <p>Ditto shall mean the whole of the proceeding description except as qualified in the description in which it occurs.</p> <p>m.s Shall mean measured separately</p> <p>a.b.d Shall mean as before described</p>	
	Carried to Collection	

ITEM	DESCRIPTION	KSHS
A.	<p>EXCEPTION TO THE STANDARD METHOD OF MEASUREMENT</p> <p>Attendance; Clause B19 (a) of the Standard Method of Measurement is delete and the following clause is substituted:-</p> <p>Attendance on nominated Sub-Contractors shall be given as an item in each case shall be deemed to include: allowing use of standing scaffolding, mess rooms, sanitary accommodation and welfare facilities; provision of special scaffolding where necessary; providing space for office accommodation and for storage of plant and materials; providing light and water for their work: clearing away rubbish; unloading checking and hoisting: providing electric power and removing and replacing duct covers, pipe casings and the like necessary for the execution and testing of Sub- Contractors' work and being responsible for the accuracy of the same.</p> <p>Fix Only:-</p> <p>"Fix Only" shall mean take delivery at nearest railway station (Unless otherwise stated), pay all demurrage charges, load and transport to site where necessary, unload, store, unpack, assemble as necessary, distribute to position, hoist and fix only.</p> <p>EMPLOYER</p> <p>The term "Employer" and "Permanent Secretary - MOE" wherever used in the contract document shall be synonymous</p>	
B.	<p>PROJECT MANAGER</p> <p>The term "P.M." wherever used in these Bills of Quantities shall be deemed to imply the Project Manager 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 Government.</p>	
C.	<p>ARCHITECT</p> <p>The term "Architect" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is Ministry of Public Works, P.O. Box 30743, NAIROBI.</p>	
C.	<p>QUANTITY SURVEYOR</p> <p>The term "Quantity Surveyor" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is Ministry of Public Works, P.O. Box 30743, NAIROBI.</p>	
D.		
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>ELECTRICAL ENGINEER</p> <p>The term "Electrical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is Ministry of Public Works, P.O. Box 30743, and NAIROBI.</p>	
B.	<p>MECHANICAL ENGINEER</p> <p>The term "Mechanical Engineer" shall be deemed to mean "The P.M." as defined above whose address unless otherwise notified is Ministry of Public Works, P.O. Box 30743, NAIROBI.</p>	
C.	<p>STRUCTURAL ENGINEER</p> <p>The term structural Engineering shall be deemed to mean The P.M as defined above whose address unless otherwise notified is Ministry of Public Works, P.O.BOX 30743, NAIROBI</p>	
D.	<p>FORM OF CONTRACT</p> <p>The Form of Contract shall be as stipulated in the Republic of Kenya's Standard Tender Document for Procurement of Building Works(2006 Edition) included herein The Conditions of Contract are also included herein Conditions of Contract These arc numbered from 1 to 37 as set out in pages 20 to 48 of these tender documents. Particulars of insertions to be made in the Appendix to the Contract Agreement will be found in the Particular Preliminaries part of these Bills of Quantities</p>	
E.	<p>BOND.</p> <p>The Contractor shall find and submit on the Form of Tender unapproved bank/Insurance Company and who will be willing to be bound the Government in an amount equal to five per cent (5%) of the Contract amount for the due performances of the Contract up to the date of completion as certified by the PROJECT MANAGER and who will when and if called upon, sign a Bond to that effect on the relevant standard form included herein, (without the addition of any limitations) on the same day as the Contract Agreement is signed, by the Government, the Contractor shall furnish within seven days another Surety to the approval of the Government.</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>PLANT, TOOLS AND VEHICLES</p> <p>Allow for providing all scaffolding, plant, tools and vehicles required for the works except in so far as may be stated otherwise herein and except for such items specifically and only required for the use of nominated Sub-Contractors as described herein. No timber used for scaffolding, formwork or temporary works of any kind shall be used afterwards in the permanent work.</p> <p>TRANSPORT.</p>	
B.	<p>Allow for transport of workmen, materials, etc., to and from the site at such hours and by such routes as may be permitted by the competent authorities.</p>	
C.	<p>MATERIALS AND WORKMANSHIP.</p> <p>All materials and workmanship used in the execution of the work shall be of the best quality and description unless otherwise stated. The Contractor shall order all materials to be obtained from overseas immediately after the Contract is signed and shall also order materials to be obtained from local sources as early as necessary to ensure that they are onsite when required for use in the works. The Bills of Quantities shall not be used for the purpose of ordering materials.</p>	
D.	<p>SIGN FOR MATERIALS SUPPLIED.</p> <p>The Contractor will be required to sign a receipt for all articles and materials supplied by the PROJECT MANAGER at the time of taking delivery thereof, as having received them in good order and condition, and will thereafter be responsible for any loss or damage and for replacements of any such loss or damage with articles and/or materials which will be supplied by the PROJECT MANAGER at the current market prices including Customs Duty and V.A.T., all at the Contractor's own cost and expense, to the satisfaction of the PROJECT MANAGER</p>	
E.	<p>STORAGE OF MATERIALS</p> <p>The Contractor shall provide at his own risk and cost where directed on the site weather proof lock-up sheds and make good damaged or disturbed surfaces upon completion to the satisfaction of the PROJECT MANAGER Nominated Sub-Contractors are to be made liable for the cost of any storage accommodation provided especially for their use.</p>	
	Carried collection	

ITEM	DESCRIPTION	KSHS
A.	<p>SAMPLES</p> <p>The Contractor shall furnish at his own cost any samples of materials or workmanship including concrete test cubes required for the works that may be called for by the PROJECT MANAGER for his approval until such samples are approved by the PROJECT MANAGER and the PROJECT MANAGER, may reject any materials or workmanship not in his opinion to be up to approved samples. The PROJECT MANAGER shall arrange for the testing of such materials as he may at his discretion deem desirable, but the testing shall be made at the expense of the Contractor and not at the expense of the PROJECT MANAGER. The Contractor shall pay for the testing in accordance with the current scale of testing charges laid down by the Ministry of Public Works.</p> <p>The procedure for submitting samples of materials for testing and the method of marking for identification shall be as laid down by the PROJECT MANAGER The Contractor shall allow in his tender for such samples and tests except those in connection with nominated sub contractors work.</p> <p>GOVERNMENT ACTS REGARDING WORKPEOPLE ETC.</p> <p>Allow for complying with all Government Acts, Orders and Regulations in connection with the employment of Labour and other matters related to the execution of the works. In particular the Contractor's attention is drawn to the provisions of the Factory Act 1950 and his tender must include for all costs arising or resulting from compliance with any Act, Order or Regulation relating to Insurances, pensions and holidays for workpeople or so the safety, health and welfare of the workpeople. The Contractor must make himself fully acquainted with current Acts and Regulations, including Police Regulations regarding the movement, housing, security and control of labor, labor 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 labor, etc., and allow accordingly in his tender. No claim in respect of want of knowledge in this connection will be</p> <p>SECURITY OF WORKS ETC.</p> <p>The Contractor shall be entirely responsible for the security of all the works stores, materials, plant, personnel, etc., both his own and sub-contractors' and must provide all necessary watching, lighting and other precautions as necessary to ensure security against theft, loss or damage and the protection of</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>PUBLIC AND PRIVATE ROADS.</p> <p>Maintain as required throughout the execution of the works and make good any damage to public or private roads arising from or consequent upon the execution of the works to the satisfaction of the local and other competent authority and the PROJECT MANAGER</p> <p>EXISTING PROPERTY.</p>	
B.	<p>The Contractor shall take every precaution to avoid damage to all existing property including roads, cables, drains and other services and he will be held responsible for and shall make good all such damage arising from the execution of this contract at his own expense to the satisfaction of the PROJECT MANAGER</p>	
C.	<p>VISIT SITE AND EXAMINE DRAWINGS.</p> <p>The Contractor is recommended to examine the drawings and visit the site the location of which is described in the Particular Preliminaries hereof. He shall be deemed to have acquainted himself therewith as to its nature, position, means of access or any other matter which, may affect his tender. No claim arising from his failure to comply with this recommendation will be considered.</p>	
D.	<p>ACCESS TO SITE AND TEMPORARY ROADS.</p> <p>prior to commencement of the work and Contractor must allow for building any necessary temporary access roads for the transport of the materials, plant and workmen as may be required for the complete execution of the works including the provision of temporary culverts, crossings, bridges, or any other means of gaining access to the Site. Upon completion of the works, the Contractor shall remove such temporary access roads; temporary culverts, bridges, etc., and make good and reinstate all works and surfaces disturbed to the satisfaction of the PROJECT MANAGER</p>	
E.	<p>AREA TO BE OCCUPIED BY THE CONTRACTOR</p> <p>The area of the site which may be occupied by the Contractor for use of storage and for the purpose of erecting workshops, etc., shall be defined on site by the PROJECT MANAGER</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>OFFICE ETC. FOR THE PROJECT MANAGER</p> <p>Afterwards dismantle the site office of the type noted in the Particular Preliminaries, complete with Furniture. He shall also provide a strong metal trunk complete with strong hasp and staple fastening and two keys. He shall provide, erect and maintain a lock-up type water or bucket closet for the sole use of the PROJECT MANAGER including making temporary connections to the drain where applicable to the satisfaction of Government and Medical Officer of Health and shall provide services of cleaner and pay all conservancy charges and keep both office and closet in a clean and sanitary condition from commencement to the completion of the works and dismantle and make good disturbed surfaces. The office and closet shall be completed before the Contractor is permitted to commence the works. The Contractor shall make available on the Site as and when required by the "PROJECT MANAGER" a modern and accurate level together with leveling staff, ranging rods and 50</p> <p>WATER AND ELECTRICITY SUPPLY FOR THE WORKS</p> <p>The Contractor shall provide at his own risk and cost all necessary water, electric light and power required for use in the works. The Contractor must make his own arrangements for connection to the nearest suitable water main and for metering the water used. He must also provide temporary tanks and meters as required at his own cost and clear away when no longer required and make good on completion to the entire satisfaction of the PROJECT MANAGER. The Contractor shall pay all charges in connection herewith. No guarantee is given or implied that sufficient water will be available from mains and the Contractor must make his own arrangements for augmenting this supply at his own cost. Nominated Sub-contractors are to be made liable for the cost of any water or electric current used and for any installation provided especially for their own use.</p> <p>SANITATION OF THE WORKS</p> <p>The Sanitation of the works shall be arranged and maintained by the Contractor to the satisfaction of the Government and/or Local Authorities, Labour Department and the PROJECT MANAGER</p> <p>SUPERVISION AND WORKING HOURS</p> <p>The works shall be executed under the direction and to the entire satisfaction in all respects of the PROJECT MANAGER who shall at all times during normal working hours have access to the works and to the yards and workshops of the Contractor and sub-Contractors or other places where work is being prepared for the contract.</p> <p>PROVISIONAL SUMS.</p> <p>The term "Provisional Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section An item A7 (i) of the Standard Method of Measurement. Such sums are net and no addition shall be made to them for profit.</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>PRIME COST (OR P.C.) SUMS.</p> <p>The term "Prime Cost Sum" or Sum" wherever used in these Bills of Quantities shall have the meaning stated in Section A item A7 (ii) of the Standard Method of Measurement. Persons or firms nominated by the PROJECT MANAGER to execute work or to provide and fix materials or goods are described herein as Nominated Sub-Contractors. Persons or firms so nominated to supply goods or materials are described herein as Nominated Suppliers.</p> <p>PROGRESS CHART.</p> <p>The Contractor shall, provide within two weeks of Possession of Site and in agreement with the PROJECT MANAGER a Progress Chart for the whole of the works including the works of Nominated Sub-Contractors; one copy to be handed to the PROJECT MANAGER and a further copy to be retained on Site. Progress to be recorded and chart to be amended as necessary as the work proceeds</p> <p>ADJUSTMENT OF P.C. SUMS.</p> <p>In the final account all P.C. Sums shall be deducted and the amount properly expended upon the PROJECT MANAGER'S order in respect of each of them added to the Contract sum. The Contractor shall produce to the PROJECT MANAGER such quotations, invoices or bills, properly receipted, as may be necessary to show the actual details of the sums paid by the Contractor. Items of profit upon P.C. Sums shall be adjusted in the final account pro-rata to the amount paid. Items of "attendance" (as previously described) following P.C. Sums shall be adjusted pro-rata to the physical extent of the work executed (not pro-rata to the amount paid) and this shall apply even though the Contractor's priced Bill shows a percentage in the rate column in respect of them. Should the Contractor be permitted to tender and his tender be accepted of any work for which a P.C. Sum is included in these Bill of Quantities profit and attendance will be allowed at the same rate as it would be if the work were executed by a Nominated Sub-Contractor.</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A	<p>ADJUSTMENT OF PROVISIONAL SUMS.</p> <p>In the final account all Provisional Sums shall be deducted and the value of the work properly executed in respect of them upon the PROJECT MANAGER'S order added to the Contract Sum. Such work shall be valued , but should any part of the work be executed by a Nominated Sub-Contractor, the value of such work or articles for the work to be supplied by a Nominated Supplier, the value of such work or articles shall be treated as a P.C. Sum and profit and attendance comparable to that contained in the priced Bills of Quantities for similar items added.</p> <p>NOMINATED SUB-CONTRACTORS</p>	
B	<p>When any work is ordered by the PROJECT MANAGER to be executed by nominated sub-contractors, the Contractor shall enter into sub-contracts and shall thereafter be responsible for such sub-contractors in every respect. Unless otherwise described the Contractor is to provide for such Sub Contractors any or all of the facilities described in these Preliminaries. The Contractor should price for these with the nominated Sub-contract Contractor's work concerned in the P.C. Sums under the description "add for Attendance".</p> <p>DIRECT CONTRACTS</p>	
C	<p>Notwithstanding the foregoing conditions, the Government reserves the right to place a "Direct Contract" for any goods or services required in the works which are covered by a P.C. Sum in the Bills of Quantities and to pay for the same direct. In any such instances, profit relative to the P.C. Sum the priced Bills of Quantities will be adjusted as described for P.C. Sums and allowed</p> <p>ATTENDANCE UPON OTHER TRADESMEN, ETC.</p>	
D	<p>The Contractor shall allow for the attendance of trade upon trade and shall afford any tradesmen or other persons employed for the execution of any work not included in this Contract every facility for carrying out their work and also for use of his ordinary scaffolding. The Contractor, however, shall not be required to erect any special scaffolding for them. The Contractor shall perform such cutting away for and making good after the work of such tradesmen or persons as may be ordered by the PROJECT MANAGER and the work will be measured and paid for to the extent executed at rates provided in these Bills.</p>	

ITEM	DESCRIPTION	KSHS
A	<p>INSURANCE</p> <p>The Contractor shall insure as required in Conditions No. 30 of the Conditions of Contract. No payment on account of the work executed will be made to the Contractor until he has satisfied the PROJECT MANAGER either by production of an Insurance Policy or and Insurance Certificate that the provision of the foregoing Insurance Clauses have been complied with in ah respects. Thereafter the PROJECT MANAGER shall from time to time ascertain that premiums are duly paid up by the Contractor who shall if called upon to do so, produce the receipted premium renewals for the PROJECT</p>	
B	<p>PROVISIONAL WORK</p> <p>All work described as "Provisional" in these bills of Quantities is subject to re-measurement in order to ascertain the actual quantity executed for which payment will be made. All "Provisional" and other work liable to adjustment under this Contract shall left uncovered for a reasonable time to allow all measurements needed for such adjustment to be taken by the PROJECT MANAGER Immediately the work is ready for measuring, the Contractor shall give notice to the PROJECT MANAGER. If the Contractor makes default in these respects he shah if the PROJECT MANAGER so directs uncover the work to enable all measurements to be taken and afterwards reinstate at his own expense</p>	
C	<p>ALTERATIONS TO BILLS, PRICING, ETC.</p> <p>Any unauthorized alteration or qualification made to the text of the Bills of Quantities may cause the Tender to be disqualified and will in any case be ignored. The Contractor shall be deemed to have made allowance in his prices generally to cover any items against which no price has been inserted in the priced Bills of Quantities.AU items of measured work shah be priced in detail and the Tenders containing Lump Sums to cover trades or groups of work must be broken down to show the price of each item before they will be accepted.</p>	
D	<p>BLASTING OPERATIONS</p> <p>Blasting will only be allowed with the express permission of the PROJECT MANAGER in writing. All blasting operations shall be carried out at the Contractor's sole risk and cost in accordance with any Government regulations in force for the time being, and any special regulations laid down by the PROJECT MANAGER governing the use and storage of explosives</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>MATERIALS ARISING FROM EXCAVATIONS</p> <p>Materials of any kind obtained from the excavations shall be the property of the Government. Unless the PROJECT MANAGER directs otherwise such materials shall be dealt with as provided in the Contract. Such materials shall only be used in the works, in substitution of materials which the Contractor would otherwise have had to supply with the written permission of the PROJECT MANAGER Should such permission be given, the Contractor shall make due allowance for the value of the materials so used at a price to be agreed</p>	
B.	<p>PROTECTION OF THE WORKS.</p> <p>Provide protection of the whole of the works contained in the Bills of Quantities including casing , casing up, covering or such other means as may be necessary to avoid damage to the satisfaction of the PROJECT MANAGER and remove such protection when no longer required and make good any damage which may nevertheless have been done at completion free of cost to the Government</p>	
C.	<p>REMOVAL OF RUBBISH ETC</p> <p>Removal of rubbish and debris from the Buildings and site as it accumulates and at the completion of the works and remove ah plant, scaffolding and unused materials at completion.</p>	
D.	<p>WORKS TO BE DELIVERED UP CLEAN</p> <p>Clean and flush gutters, rainwater and waste pipes, manholes and drains, wash (except where such treatment might cause damage) and clean all floors, sanitary fittings, glass inside and outside and any other parts of the works and remove all marks, blemishes, stains and defects from joinery, fittings and decorated surfaces generally, polish door furniture and bright parts of metalwork and leave the whole, of the buildings watertight, clean, perfect and fit for occupation to the approval of the PROJECT MANAGER</p>	
	Carried to collection	

ITEM	DESCRIPTION	KSHS
A.	<p>GENERAL SPECIFICATION.</p> <p>For the full description of materials and workmanship, method of execution of the work and notes for pricing, the Contractor is referred to the Ministry of Roads and Public Works and Housing General Specification dated 1976 or any subsequent revision thereof which is issued as a separate document, and which shall be allowed in all respects unless it conflicts with the General Preliminaries, Trade Preambles or other items in these Bills of Quantities.</p>	
B.	<p>TRAINING LEVY</p>	
	<p>The Contractor's attention is drawn to legal notice No. 237 of October, 1971, which requires payment by the Contractor of a Training Levy at the rate of 1/4 % of the Contract sum on all contracts of more than Kshs. 50,000.00 in value;</p>	
C.	<p>MATERIALS ON SITE</p>	
	<p>All materials for incorporation in the works must be stored on or adjacent to the site before payment is effected specifically exempted by the PROJECT MANAGER. This includes the material of the Main Contractor, Nominated Sub-contractors and Nominated suppliers.</p>	
D.	<p>HOARDING</p>	
	<p>The Contractor shall enclose the site or part of the works under construction with a hoarding 2400 mm high consisting of iron sheets on 100 x 50 mm timber posts firmly secured at 1800 mm centers with two 75 x 50 mm timber rails for a total length of approximately three hundred meters. The Contractor is in addition required to take all precautions necessary for the safe custody of the works, materials, plant, public and Employer's property on the site.</p>	
E.	<p>CONTRACTOR'S SUPERINTENDENCE/SITE AGENT</p>	
	<p>The Contractor shall constantly keep on the works a literate English speaking Agent or Representative, competent and experienced in the kind of work involved who shall give his whole experience in the kind of work involved and shall give his whole time to the superintendence of the works. Such Agent or Representative shall receive on behalf of the Contractor all directions and instructions from the Project Manager and such directions shall be deemed to have been given to the Contractor in accordance with the Conditions of Contract.</p>	
	<p>Carried to collection</p>	

ITEM	DESCRIPTION	KSHS
	<u>COLLECTION</u>	
	Brought Forward From Page GP/1	
	Brought Forward From Page GP/2	
	Brought Forward From Page GP/3	
	Brought Forward From Page GP/4	
	Brought Forward From Page GP/5	
	Brought Forward From Page GP/6	
	Brought Forward From Page GP/7	
	Brought Forward From Page GP/6	
	Brought Forward From Page GP/9	
	Brought Forward From Page GP/10	
	Brought Forward From Page GP/11	
	Brought Forward From Page GP/12	
	TOTAL FOR GENERAL PRELIMINARIES CARRIED TO SUMMARY	

ITEM	DESCRIPTION	KSHS
	<u>SUMMARY</u>	
A.	Particular Preliminaries (PP/7)	
B.	General Preliminaries (GP/13)	
	TOTAL CARRIED TO GRAND SUMMARY	

PREAMBLES AND PRICING NOTES

PREAMBLES AND PRICING NOTES

A. GENERALLY

All work to be carried out in accordance with the Ministry of Roads, Public Works and Housing General Specifications for Building Works issued in 1976 or as qualified or amended.

B. MANUFACTURERS' NAMES

Where manufacturers' names and catalogue references are given for guidance to quality and standard only, alternative manufacturer of equal quality will be accepted at the discretion of the Project Manager.

C. WALLING

All precast concrete blocks shall be manufactured by the methods and to the sizes specified in the Ministry of Roads, Public Works and Housing "Specification for Metric Sized Concrete Blocks for Building (1972)"

Walling of 100 mm thickness or under shall be reinforced with hoop iron every alternate course.

Prices for walling must allow for all costs in preparing, packing and sending sample blocks for testing as and when required by the Project Manager.

D. CARPENTRY

The grading rules for cypress shall be the same as for podocarpus and all timber used for structural work shall be select (second grade).

All structural timber must conform to the minimum requirements for moisture content and preservative treatment and timber prices must allow for preparing, packing and sending samples for testing when required.

Prices must also include for all nails and fasteners.

A. JOINERY

Cypress for joinery shall be second grade in accordance with the latest grading rules of the Kenya Government.

Where Mahogany is specified, this refers to prime grade only. The Contractor may with the approval of the Project Manager, use either Msharagi or Mvuli in lieu of Mahogany but such approval will be given only in the case of shortages of the hardwoods specified.

Plugging shall be carried out by drilling walling or concrete with masonry drill and filling with propriety plugs of the correct sizes. Cutting with hammer and chisel will not be allowed.

Prices for joinery must include for pencil rounded arises, protection against damage, nails, screws, framing and bedding in cement mortar as required.

Sizes given for joinery items are nominal sizes and exact dimensions of doors, etc, must be ascertained on site.

B. IRONMONGERY

Ironmongery shall be as specified in the Bills of Quantities or equal and approved.

Prices must include for removing and re-fixing during and after painting, labeling all keys, and for fixing to hardwood, softwood, concrete or blockwork.

Catalogue references given for ironmongery are for purposes of indicating quality and size of item(s). Should the Contractor wish to substitute the specified item(s) with others of equal quality, he must inform the Project Manager and obtain approval in writing.

C. STRUCTURAL STEELWORK

All structural steelwork shall comply with the Ministry of Public Works "Structural Steelwork Specification (1973) and shall be executed by an approved Sub-contractor.

A. PLASTER WORK AND OTHER FINISHES

All finishing shall be as described in the general specifications and in these Bills of Quantities.

Prices for paying are to include for brushing concrete clean, wetting and coating with cement and sand grout 1:1.

Rates for glazed wall tiling are to include for a 12 mm cement and sand (1:4) backing screed unless otherwise specified in these Bills of Quantities.

B. GLAZING

Where polished plate glass is specified, this refers to general glazing quality.

Prices for glazing shall include for priming of rebates before placing putty.

The Contractor will be responsible for replacing any broken or scratched glass and handing over in perfect condition.

C. PAINTING

All paint shall be 1st quality "Crown" or other equal and approved

Painting shall be applied in accordance with the manufacturers' instructions.

Prices for painting are to include for scaffolding, preparatory work, priming coats, protection of other works and for cleaning up on completion. Prices for painting on galvanized metal are to include for mordant solution as necessary.

BILL NO.2

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>MASONARY WALL FENCE.</u> <u>(ALL PROVISIONAL)</u>				
A	Clear the site along the perimeter fence of all bushes, shrubs, grass, small trees, etc, including grabbing up roots and cart away.	4500	SM		
	<u>EXCAVATIONS.</u>				
	<i>Excavate include maintaining and supporting sides and keeping free from water mud and fallen material.</i>				
B	Excavate foundation trench not exceeding 1.5m deep starting from reduced level and stock pile on site as directed.	1350	CM		
C	Ditto; column bases.	500	CM		
D	Extra over excavations for excavation in rock.	120	CM		
	<u>Planking and strutting</u>				
E	Allow for maintaining and supporting sides of excavations and for keeping the same free from fallen material.		ITEM		
F	Allow for keeping excavations free of water and mud by pumping, pailing or other approved means.		ITEM		
	<u>FILLING/DISPOSAL.</u>				
G	Return fill and ram selected imported murrum material around foundations.	1970	CM		
H	Load, wheel and deposit surplus excavated material where directed by architect on site not exceeding 50m away.	850	CM		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>CONCRETE WORKS.</u>				
	<u>Concrete 1:4:8 as described in:-</u>				
A	50mm thick blinding	900	LM		
	Reinforced concrete 1:2:4 as described in:-				
B	Strip foundations	225	CM		
C	Column bases.	126	CM		
D	Columns	136	CM		
E	Ground beam	90	CM		
	<u>Reinforcement.</u>				
	Square twisted mild steel reinforcement in structural concrete				
E	8mm diameter bars	5500	KG		
F	10mm diameter bars	2780	KG		
G	12mm diameter bars.	8100	KG		
H	16mm diameter bars.	7,950	KG		
	<u>Sawn formwork to:-</u>				
I	Strip foundation	800	SM		
J	Column bars and columns	2300	SM		
K	Sides of beam	1200	SM		
	TOTAL CARRIED TO SUMMARY				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>WALLING.</u>				
A	200mm thick natural machine dressed stone walling in cement sand mortar 1:3	6750	SM		
B	Extra over walling for horizontal key pointing externally.(plaster to skirting,beam and columns)	6000	SM		
C	Ditto but to walls internally.	6000	SM		
D	Bagwash to both internal and external walls, painting to skirting,beam and columns	6000	SM		
	Reinforced concrete 1:2:4 as described in:-				
E	Beam on top of the entire wall	90	CM		
	Barbed wire (as wire product ltd).				
F	16 gauge barbed wire in 6no. strands.	9000	LM		
G	50 x 50 x 4mm steel angle line (Y type)	460	LM		
H	Razor wire Supply and fix 450mm diameter razor wire on top of the perimeter wall	1500	LM		
TOTAL TO SUMMARY					

ITEM	DESCRIPTION	QTY	UNITS	RATE	AMOUNT
	<p><u>SUMMARY.</u></p> <p>Excavations from Page PF/1</p> <p>Concrete Works from Page PF/2</p> <p>Walling from page PF/3</p>				
	TOTAL CARRIED TO MAIN SUMMARY.				

BILL NO. 3**4 NUMBER GATES**

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
A	Excavate pit for column base not exceeding 2.0M Deep part – return fill in and ram and part spread on site as well be directed.	5	CM		
B	Concrete (1:2:4) in base size 1000 x 1000x400mm thick.	5	CM		
C	400 x 400 x 4000mm high concrete column each reinforced including all necessary formwork.	10	CM		
D	A pair of galvanized mild steel gate overall size 6000mm wide x 2400mm high in two equal leaves 3000mm wide 2400mm high constructed of 16mm square mild steel Minor rods at 200mm centers and 1000mm high; 16mm square mild steel main rods spear headed vertical rods at 200mm centers and 2000mm high patterned as per provided drawings.	4	NO.		
E	Ditto; gate 1500 x 2400mm high in one leaf.	4	NO		
F	Prime once, and apply 2 coats of first quality gloss paint to general surfaces of steel gate.	90	SM		
G	Prepare and apply one undercoat and two finishing coats of first quality gloss paint to plastered surfaces of columns.	60	SM		
H	Allow for electrical works as per Engineers instructions on site		ITEM		
	TOTAL GATE TO SUMMARY				

BILL NO. 4
SENTRY BOX (3M BY 3M) (4 NUMBER)

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUBSTRUCTURE				
A	Excavate surface to remove vegetable soil average 150mm deep and remove from site	12	SM		
B	Excavate for strip foundation commencing from stripped level to as least 1.2m deep	13	CM		
	Excavate for steel column commencing from stripped level to at least 1.2m deep				
C	Return fill and ram selected excavated materials around foundation	2	CM		
D	Cart away surplus excavated materials	1	CM		
E	Approved hardore filling 40mm thick in making up levels well compacted and blinded to receive concrete (ms)	2.4	CM		
F	50mm thick quarry dust blinding to surface of hard core	12	SM		
G	Approved insecticide treatment to surface of excavations	12	SM		
H	500mm gauge polythene sheet damp roof membrane	12	SM		
		14	LM		
I	200mm wide damp proof course	12	SM		
J	Fabric reinforcement class A142				
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>PLAIN CONCRETE</u>				
A	Strip foundation	2	CM		
	<u>SQUARE TWISTED HIGH TENSIL STEEL BAR REINFORCEMENT</u>				
B	8mm square twisted bar	22	KG		
C	12mm ditto to ring beam	40	KG		
	<u>MASONRY</u>				
D	200mm thick natural stone walling quarry dressed bedded and jointed in cement sand (1:3) mortar reinforced with hoop iron at alternate course	17	SM		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SAWN FORMWORK</u>				
A	Sides of floor slab 100mm high	14	SM		
B	<u>SUPERSTRUCTURE</u>				
	<u>WALLING</u>				
C	200mm thick machine dressed natural quarry stone block walling in cement; sand (1:4) mortar including hoop iron reinforcement into every alternate course	38	LM		
D	45mm thick hardwood timber paneled door size 800 x 2050mm	1	NO		
E	150 x 50mm frames rebated and framed door in superior quality hardwood	5	LM		
F	25 12mm/w moulded architrave to architects approval	5	LM		
CARRIED TO COLLECTION					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>ROOF</u>				
	All cypress roof timber to be treated with anti-termite solution	10	LM		
A	150 x 50mm rafters	6	LM		
B	75 x 50mm purlins at 6000 c/c	4	LM		
C	100mm x 50mm wall plate	12	LM		
D	200 x 25mm fascia board	12	SM		
	<u>ROOF COVERING</u>				
E	Pre-painted G.C.I sheets gauge 28	10	SM		
F	10mm dia bolts 75mm long with nuts and washers	6	SM		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>FINISHES</u>				
A	12mm thick two coats cement sand (1:4) rendering with a wood float finish on block work	18	SM		
	<u>PANTING</u>				
B	Prepare and apply two coats of permaplast exterior quality crown paint on rendered surface	18	SM		
	<u>INTERNAL WALL FINISH</u>				
C	12mm thick two coat cement sand (1:4) rendering with a wood float finish on block work	16	SM		
	<u>PAINTING</u>				
D	Prepare and apply three coats crown silk vinily interior quality paint on plastered surface	16	SM		
E		5	SM		
F	25mm thick cement screed floor finish	5	SM		
G	Approved 3 coats or red concrete floor paint of superior quality				
	Approved 1200 x 2800 high in built cupboard with inner shelves complete with door handles key and lock. Cupboard to be on 100mm plinth and to be finished with two coats of clear vanish paint		ITEM		
	Allow for provisional sum for electrical supply and installation as per site Engineer's instruction		ITEM		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>IRON MONGERY</u>				
A	100mm pressed brass butt hinges	3	NO		
B	Three level mortise lock	1	NO		
	<u>WINDOWS</u>				
C	40 x 25 x 4mm hollow square mild steel tube as frame to window opening with 16mm diameter infill size 600 x 800	3	NO		
	CARRIED TO COLLECTION				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>COLLECTION</u>				
A	Brought forward from page GH/01				
B	Brought forward from page GH/02				
C	Brought forward from page GH/03				
D	Brought forward from page GH/04				
E	Brought forward from page GH/05				
F	Brought forward from page GH/06				
	TOTAL FOR ONE NUMBER				
	X 4				
	TOTAL FOR 4 NUMBER				
	CARRIED TO GRAND SUMMARY				

BILL NO 5
BILLS OF QUANTITIES FOR WAITING BAY AT GARISSA UNIVERSITY
COLLEGE (2 NUMBER ON ALL SIDES OF THE MAIN ENTRANCE
GATE)

Item	Description	QTY	Unit	Rate	Kshs
1.00	<u>SUB - STRUCTURES(ALL PROVISIONAL)</u>				
.	<u>Measured upto and including surface bed Earthworks.</u>				
A	Clear the site of all grass and shrubs and cart away all the arising material	50	S.m		
B	Excavate oversite to remove top vegetable soil average 200mm deep and remove from the site	50	S.m		
C	Excavate foundation trenches starting from stripped level not exceeding 1.50metres deep	30	C.m		
D	Extra over all excavations for excavating in hard rock with or without blasting.	2	C.m		
E	Return, fill in and ram selected excavated material in and around foundations	17	C.m		
F	Remove from the site surplus excavated materials or spread on site as directed.	13	C.m		
G	Allow for plunking and strutting to uphold the sides of foundation trenches	item	sum		
H	Allow for keeping the whole of the excavations free from storm or running water by means of pumping or otherwise	item	sum		
	<u>Concrete Works</u>				
H	50mm thick mass concrete 1:4:8 mix blinding to foundations	18	S.m		
J	Vibrated reinforced concrete 1:2:4 mix in strip foundations	5	C.m		
	<u>Reinforcements.</u>				
K	10mm diamter high tensile square twisted mild	8	NO		
L	8mm diamter high tensile square twisted mild steel bars in foundations	8	No		
	Total carried to collection				

Item	Description	QTY	Unit	Rate	Kshs
	<u>Walling and Fillings</u>				
A	200mm thick dressed natural quarry stone bedded in cement/sand 1:4mix mrtar and reinforced in 25mm wide 500 gauge hoop iron after every alternative courses	40	S.m		
B	300mm thick well compacted broken stone hardcore fill	50	S.m		
C	300mm thick approved murrum blinding to top of hard core watered and well compacted	50	S.m		
D	Treat surface of hardcore including top of walling with approved anti-termite insicticide, applied in accordance to the manufactures's printed instructions	50	S.m		
E	Supply and fix a 142 BRC	50	S.M		
F	Vibrated reinforced concrete 1;2;4 to floor slab	50	S.M		
Total carried to collection					

Item	Description	QTY	Unit	Rate	Kshs
2.00	<u>SUPER STRUCTURES</u>				
	<u>FRAME</u>				
A	100x100x4mm thick RHS columns, 3000mm overall length, bedded to concrete 1:2:4 mix, with 3No.,200x200x6mm thick mild steel leats welded to the top and sides, finished with one coat of Red Oxide primer.	16	No		
B	100x100x4mm thick RHS wall plate, 3000mm overall length, with 200x200x6mm thick steel cleat welded to each of the two ends, bolted to vertical steel columns with and including 16mm diameter bolts.	16	NO		
A	200mm thick dressed natural quarry stone bedded in cement/sand 1:4mix mrtar and reinforced in 25mm wide 500 gauge hoop iron after every alternative courses	40	S.m		
3.00	<u>Roofing</u>				
	<u>Construction</u>				
C	100x100x4mm thick RHS rafters, 5000mm overall length, with 200x200x6mm thick steel cleat welded to each of the two ends, bolted to vertical steel columns with and including 16mm diameter bolts.	60	S.m		
D	100x100x6mm thick steel anle cleats welded to top of wall plates,and to top or sides of rafters.	25	No		
E	100x50x4mm thick zed purlins bolted to steel cleat on top of rafters(m.s)	50	Lm		
F	28 Gauge IT 4 Box Profile sheets, Resin coated, bolted to top of rafters(m.s) with and including J-Bolts.	50	Sm		
G	16mm thick cement: sand 1:4 mix plaster, to concrete or block work bases, steel trowelled hard and smooth.	80	Sm		
H	Prepare surfaces and apply one undercoat and two finishing coats PVA based Plastic Emulsion Paint to steel trowelled plastered surfaces.	80	Sm		
I	Ditto but Gross Oil paint to general metal surfaces.	80	Sm		

J	Tiles to floor plus screed	50	SM	
	Total carried to summary			

Total page 3

Item	Description	Kshs
9.00	<u>Summary</u>	
.		
A	Total for Sub Structures from page 1	
B	Total for superstructures from page 2	
C	Total for superstructures from page 3	
Total Carried to summary		

BILL NO.6
LAYING OF CABROS FROM THE NEW MAIN GATE TO THE ACESROAD FROM THE
EXISTING GATE AT THE UNIVERSITY

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>SUBSTRUCTURE (ALL PROVISIONAL)</u>				
	<u>LANDSCAPING</u>				
A	Excavate over site average 150mm deep ,wheel and deposit as directed by engineer on site	900	SM		
B	Approved hardcore filling to make up ground levels for drainage works	900	SM		
C	Allow for compaction using plate compactor to make the ground firm.	900	SM		
D	Supply and lay clean river sand for areas to be fixed with paving blocks as instructed by the the engineer on site.	900	SM		
	<u>PRE-CAST CONCRETE PAVING</u>				
	<u>BLOCKS(CABROS)</u>				
E	60 mm thick medium duty (available choice- Quad, interlocking,uni,Hexagonal, E- ,Diplomat,Décor,Circlestone,Lockblock etc) paving blocks with minimum strength of 45N/M2	900	SM		
F	Supply and fix kerbs along the edges of the cabros	300	LM		
	CARRIED TO MAIN SUMMARY				

BILL NO.7

WATCH TOWERS (2 NO)

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS. CTS
A	<u>ALL PROVISIONAL</u> Allow provisional sum for erection of watch towers as per Engineer's specifications		SUM		3,000,000
	TOTAL GATE TO SUMMARY				3,000,000

WT/1

BILL NO.8
3 NO. TWIN TOILETS PLUS WATER
RETICULARION

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS.	CTS
A.	Clear site off bushes, shrubs and small trees, grub up roots and burn arising.	22	SM			
B.	Excavate pit not exceeding 1.50 m deep.	3	CM			
C.	Extra over excavation for excavating in rock	8	CM			
D.	Cart away surplus excavated materials.	23	CM			
E.	Return fill in and ram	4	CM			
F.	1:2:4 concrete in foundation	1	CM			
G.	100mm thick 1:24 concrete in suspended corner slab	5	SM			
H.	8mm diameter reinforcement bars.	25	Kgs			
I.	12mm ditto	67	Kgs			
J.	B.R.C ref. A142 reinforcement	5	SM			
	Carried to Collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS.	CTS
A.	Sawn formwork soffit of slabs	4	SM			
B.	Ditto edges of corner slab 75-150mm high	5	LM			
C.	Extra over formwork for boxing to form 300x150mm hole in 100mm thick concrete floor slab.	2	NO			
E.	200mm thick concrete block foundation wall in 1:3 mortar	13	SM			
	SUPERSTRUCTURE					
F.	150mm thick concrete block walling in gauged mortar.	23	SM			
G.	225x150mm precast concrete vent blocks.	1	SM			
H.	Extra over walling for raking cutting edges.	6	LM			
I.	Concrete 1:2:4 hutch size 250x150mm thick diameter bars and 8mm diameter stirrups including all necessary formwork.	3	LM			
J.	100x50mm sawn cypress wall plate fixed with hoop iron straps.	5	LM			
K.	75x50mm ditto rafters	8	LM			
L.	50x50mm purlins	10	LM			
M.	G.C.I gauge 28 roofing sheets	8	SM			
N.	200x25mm wrot cypress fascia board.	12	LM			
O.	100x50mm sawn cypress door frame rebated.	10	LM			
	Carried to Collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS.	CTS
A.	45mm thick Panelled door size 900x2100mm.	2	No			
B.	100mm pressed butt hinges mild steel pad bolt	3	Prs			
C.	200mm long including medium long including medium size padlock	2	No			
D.	100mm M.S tower bolt	2	No			
E.	100mm diameter U.P.V.C vent pipe with plastic balloon grating.	3	LM			
F.	12mm thick cement and sand 1:4 plaster	22	SM			
G.	Ditto rendering	24	SM			
	<u>SCREEN WALL</u>					
I.	Excavate foundation trench not exceeding 1.50m deep.	3	CM			
J.	1:2:4 concrete in foundation	1	CM			
K.	12mm square twisted reinforcement bars	14	Kgs			
L.	8mm ditto	4	Kgs			
M.	Return fill in and ram	1	CM			
N.	Cart away surplus excavated materials	2	CM			
O.	150mm thick foundation waling	8	SM			
P.	150mm thick honey combed screen walling in ganged mortar	9	SM			
Q.	12mm thick cement and sand 1:4 rendering to honey combed walling	19	SM			
	Carried to Collection					

ITEM	DESCRIPTION	QTY	UNIT	RATE	SHS.	CTS
	<u>PAVING</u>					
A.	50mm thick cast in situ paving slabs fair faced	10	SM			
B.	100mm thick compacted murrum	10	SM			
	<u>PAINTING</u>					
C.	Prepare and apply 3 coats emulsion paint plastered walling	22	SM			
D.	Ditto rendered wall surfaces	24	SM			
E.	Ditto rendered honey combed surfaces	18	SM			
F.	25mm thick cement and sand floor screed furnished smooth	4	SM			
G.	Knot, prime and stop and apply one undercoat and 2 coats gloss paint on general surface of timber doors.	6	SM			
H.	Ditto door frame 100-200mm girth	10	LM			
I	Prepare and apply one coat wood prime on back of door frame not exceeding 100mm girth	10	SM			
	Carried to Collection					

PL/4

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p><u>COLLECTION</u></p> <p>From page PL/1</p> <p>Fro page PL/2</p> <p>From page PL/3</p> <p>From page PL/4</p> <p style="text-align: center;">TOTAL FOR TWIN</p> <p style="text-align: center;">X</p> <p style="text-align: center;">3</p>				
	Total of 6 No. VIP TOILETS				

SEPTIC TANKS,SOAK PITS ,TANKS AND WATER RETICULATION

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	135,000 LITRES CAPACITY SEPTIC TANK FOR 600 PERSONS AND ASSOCIATED SOAKAGE AREA				
	Excavation				
	Excavate in pit for septic tank starting from ground level				
A	Depth not exceeding (n.e) 15m	8	Cm		
B	Ditto, depth not limited to (n.l.t) 1.5m but not exceeding 2.0m	8	Cm		
C	Ditto depth not limited to 2.0m but not exceeding 2.5m	8	Cm		
D	Ditto depth not limited to 2.5m but not exceeding 3.0m	8	Cm		
E	Ditto depth not limited to 3.0m but not exceeding 3.5m	75	Cm		
F	Ditto depth not limited to 3.5m but not exceeding 4.0m	150	Cm		
G	Trim bottom of excavated surface	50	Sm		
	Total carried to collection page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Septic Tank Cont'd				
	Concrete class 15 (mix 1:3:6)				
A	Mix and place 50mm concrete blinding	3	Cm		
	Vibrated reinforced concrete class 20/20 (mix 1:2:4)				
B	Mix and place 200mm thick concrete in base slab	10	Cm		
C	Ditto but in 250mm thick wall	21	Cm		
D	Ditto but in 200mm thick wall	3	Cm		
E	Ditto but in 150mm thick scum baffle wall	2	Cm		
F	Ditto but in 200mm thick suspended cover slab	16	Sm		
	Mild steel reinforcement to B.S 4449				
G	8mm diameter bars	20	Kgs		
H	10mm diameter bars	113	Kgs		
Total carried to collection page					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BRC mesh reinforcement to B.S 1483 concrete class 20/25 (mix 1:2:4)				
A	BRC mesh A420	16	Sm		
	Formwork				
B	Sawn form work to: - Interior sides of vertical walls	83	Sm		
C	External sides of vertical walls	72	Sm		
D	Soffit of suspended slab	30	Sm		
E	Sides of suspended slab, 150mm-225mm wide	22	M		
F	Ditto to sides of entry and exit manholes	3	Sm		
G	Boxing in formwork to form opening in cover slab for 600x450mm manhole cover and frame 150-225mm wide	5	M		
H	Return fill and ram selected approved material around external sides of septic tank	62	Cm		
	Water proof cement rendering				
J	12mm thick sulphate resisting cement sand (mix 1:3) to base slab	32	Sm		
K	Ditto to sides of vertical walls	92	Sm		
	French drains				
	Excavate trench for agricultural pipe n.e 200mm in diameter for French drains to detailed drawing NO (50) 5344, backfill after laying of pipes and cart away surplus excavated material				
	Total carried to collection page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	French drains cont'd				
A	Depth to invert n.e 1.5m	100	Cm		
B	Ditto depth n.l.t 1.5m but n.e 20.0m	27	Cm		
C	Distribution manholes Excavate pit for rectangular distribution manhole as per detailed drawing No (50) 5351				
E	Depth n.e 1.5m	5	Cm		
F	Ditto depth n.l.t 1.5m but n.e 2.0m	5	Cm		
	Concrete class 15 (mix 1:3:6)				
G	Mix and place 50mm thick blinding to manholes	3	Cm		
	Vibrated concrete class 20/20 (mix 1:2:4)				
H	Mix and place 15mm thick concrete class 20 as base slab	1	Sm		
I	Ditto in 150mm thick reinforced concrete cover slab	3	Sm		
	Total carried to collection page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Distribution manholes cont'd				
A	200mm thick dressed natural stone	12	Sm		
B	12mm thick water proof cement rendering to vertical walls and base slab	24	Sm		
	Soak pits				
C	Excavate pit for circular soak pit as per detailed drawing No. (50) 5345 depth not less than 3.0m but not less than 5.0m	36	Cm		
	Concrete class 15 (mix 1:3:6)				
D	Mix and place 50mm thick concrete blinding in strip footing	1	Cm		
E	Ditto but 100mm thick strip footing	1	Cm		
	Walling				
F	200mm thick dressed natural stone to detail 50(5345)	33	Sm		
G	12mm thick water proof cement rendering to vertical walls	33	Sm		
	Vibrated concrete class 20/20 (mix 1:2:4)				
H	Mix and place concrete class 20/20 in 150mm thick suspended slab	2	Cm		
	Mild steel reinforcement bars to BS 4449				
I	12mm diameter round bars	92	Kgs		
J	Provide 200mm diameter stone blocks or hardcore in soak pit	48	Cm		
K	Provide and fix 600 x 450mm medium duty C.I manhole cover and frame to BS 497	8	No		
	Total carried to collection page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	Allow for a provisional sum of the construction of a tower and platform for tank of 10,000 liters capacity; tower height, base and platform 6m, 3mx3m respectively, supply and fix concealed couple toilets sets, unions, non-returns, Pegler gate valves/stop corks, pipes, Arabic showers, angle valves, toilet paper holders, floor traps and gulley traps complete with plumbing and drainage works as per Engineers' site instructions.	3	NO		
	Total carried to collection page				

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<p data-bbox="277 344 532 384">SUMMARY PAGE</p> <p data-bbox="277 473 643 513">A 3NO TWIN .VIP TOILETS</p> <p data-bbox="277 602 878 680">B SEPTIC TANKS,SOAK PITS ,TANKS AND WATER RETICULATION</p>				
	Total carried to collection main summary				

BILL NO 9

BILL OF QUANTITIES FOR THE PROPOSED INSTALLATION OF A SECURITY SYSTEM AT GARISSA UNIVERSITY COLLEGE.

BILL NO.1. INSTALLATION OF CCTV SYSTEM

Tenderers to note that quantities provided are only provisional, actual works shall be determined/ measured on site and is what shall be paid for.

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, Install, Test and Commission the following:				
1.	1/3” High resolution, 550 TVL, Digital IR (all-weather) day and night Cameras –vandal proof complete with Auto Iris Varifocal lens as vista or equal and approved(PTZ)	20	NO.		
2.	1/3” High resolution, 550 TVL, color fixed dome camera complete with Auto Iris Varifocal lens as vista or equal and approved	5	NO.		
3.	Camera Indoor housing IP66 rated c/w mounting bracket as VISTA or equal and approved	12	NO.		
4.	43” LCD display unit (Flat screen, TFT)	2	NO.		
5.	32 – Channel Digital Video recorder /multiplexer with minimum storage capacity of 1 terabyte.	1	NO.		
6.	Video Grade RG 59 coaxial cable complete with connectors	3500	LM		
7.	32 Channels, 20A un-interruptible power supply unit (UPS) for the cameras complete with enclosure and rack mounted	1	NO.		
8.	22U Cabinet to house the DVR & UPS	1	NO.		
9.	Cable trunks		ITEM		
10.	3 TB SATA Hard disk	2	NO.		
11.	Joystick and accessories for above PTZ cameras operation		ITEM		
TOTAL CARRIED TO COLLECTION PAGE H/3					

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, Install, Test and Commission the following:				
12.	Excavate the trench not exceeding 750mm deep for cabling	3500	LM		
13.	Allow for training of 2No.technical staff on the usage and maintenance of the equipments		ITEM		
14.	Allow for training of 2No.operators on the usage of the equipments		ITEM		
15.	Allow for warranty and servicing of the installations for a period of 12 months		ITEM		
	<u>ALARM SYSTEM</u>				
16.	20ADP SWITCH fuse with cover painted red and an attached label with the conspicuous legend 'ALARM –SWITCH', complete with all wiring in 3x2.5mm ² sc PVC copper cables drawn in trunking and concealed 28mm diameter conduit from a 20A MCB in	2	NO.		
17.	Break glass call points flash mounted as menveir model No,MBG913 or approved equivalent.	2	NO.		
18.	FIRE BELL SOUNDERS;-				
	i. 24V DC 6" [150mm] as Menveir Model No, MBM 246 or approved equivalent	3	NO.		
	ii. Weather-proof electronic sounder-deep base Rated 105Db at 1M as Menveir Model No, MWS 424/DB or approved equivalent.	3	NO		
TOTAL CARRIED TO COLLECTION PAGE H/3					

COLLECTION PAGE FOR SECURITY SYSTEM.

ITEM	DESCRIPTION	QTY	UNITS	RATE	AMOUNT
	<p><u>COLLECTION</u></p> <p>From page H/1</p> <p>From page H/2</p>				
	<p>TOTAL FOR INSTALLATION CARRIED TO MAIN SUMMARY.</p>				

BILL NO.10**PROPOSED SOLAR SECURITY LIGHTING INSTALLATION IN GARISSA UNIVERSITY COLLEGE COMPOUND, GARISSA.**

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply, Install, Test and Commission the following:-				
1	120watts solar panel (mono crystalline)	10	NO.		
2	120AH 12V solar battery MF	10	NO.		
3	9 meter galvanized mild steel pole with panel frames, control box battery carrier	10	NO.		
4	60 watts Solar lamps (LED Luminas)	10	NO.		
5	10A charge controller with a timing function	10	NO.		
6	All the associated cabling & accessories	Lot	Lot		
7	Metallic base slabs with plinth bolted to the main pole	Set	Set		
8.	Solar powered floodlight with motion sensing activation.	5	NO		
9.	Accessories for the above floodlight as below <ul style="list-style-type: none">➤ LED light➤ Power socket➤ Motion sensor➤ Solar panel➤ Power cable				
	SUB-TOTAL				
	SUB-TOTAL FOR SOLAR SECURITY LIGHTING C/F TO THE MAIN SUMMARY PAGE				

ITEM	DESCRIPTION	QTY	UNITS	RATE	AMOUNT
	<p><u>P.C AND PROVISIONAL SUMS.</u></p> <p>The Contractor shall include in his tender the following to be deducted in whole or in part as directed by the Project Manager.</p>				
A	<p>Allow Provisional sum of Kenya Shillings Three Million Three Hundred Thousand (Kshs.3,300,000) only for contingencies.</p>				3,300,000
	<p>TOTAL FOR P.C AND PROVISIONAL SUMS CARRIED TO MAIN SUMMARY</p>				3,300,000

**BILL OF QUANTITIES
FOR
PROPOSED MASONRY PERIMETER FENCING, 3 NO GATES, 2 NO WATCH TOWERS,
CABRO LAYING, INSTALLATION OF SECURITY SYSTEM AT GARISSA UNIVERSITY
COLLEGE**

MAIN SUMMARY

BILL NO.	DESCRIPTION	FOR CONTRACTORS USE (KSHS.)	FOR OFFICIAL USE ONLY (KSHS.)
1	PRELIMINARIES (BILL NO. 1)		
2	PERIMETER FENCE (BILL NO. 2)		
3	4 NO GATES,4 NO SENTRY BOX,2 NO WAITING BAY(BILL NO. 3,4,5)		
4	CABRO LAYING (BILL NO.6)		
5	2 NUMBER WATCH TOWERS (BILL NO.7)		
6	3 NUMBER TWIN TOILETS PLUS WATER RETICULATION (BILL NO.8)		
7	INSTALLATION OF SECURITY SYSTEM (BILL NO.9)		
8	SOLAR LIGHTING (BILL NO 10)		
	P.C. AND PROVISIONAL SUMS		
	SUB-TOTAL		
	ADD 16% VAT		
	TOTAL CARRIED TO FORM OF TENDER		

Amount in words -----

Tenderer's signature and stamps -----

Address -----

Date -----

Witness's Name -----

Signature -----

Description -----

Address -----

Date -----