





# TENDER FOR LAISAMIS INTEGRATED PROJECT

# **MARSABIT COUNTY**

**TENDER REF NO: CONCERN/101510/2023/12** 

**CONCERN WORLDWIDE** 

P.O. BOX 13850-00800 NAIROBI, KENYA

DECEMBER, 2023

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## **INVITATION TO TENDER**

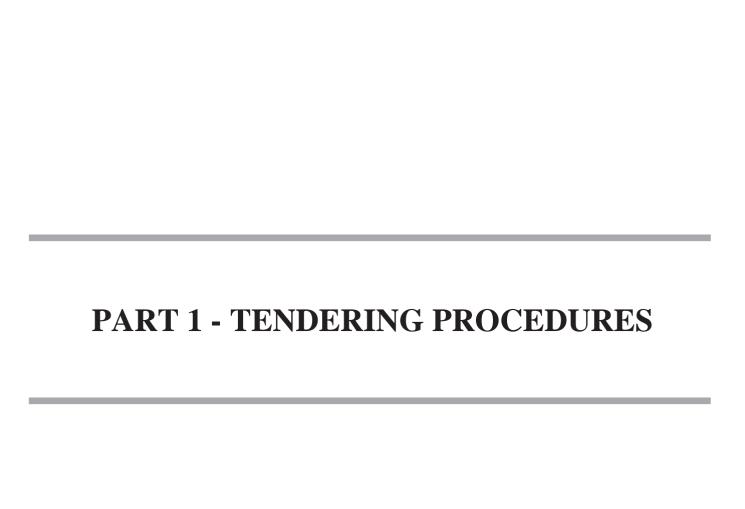
#### **PROCURING ENTITY: CONCERN WORLDWIDE**

CONTRACT NAME AND DESCRIPTION: LAISAMIS INTEGRATED PROJECT: DESILTING AND EXPANSION OF NAMAREI WATER PAN, REHABILITATION OF NGOROROI WATER SUPPLY PROJECT, REHABILITATION OF OLTUROT & NGOROROI WATER SUPPLY PROJECT AND CONSTRUCTION OF 2 BLOCKS OF 3 DOOR VIP LATRINES AT GURAM PRIMARY SCHOOL

The **invites** sealed tenders for the following works;

- a) Desilting and expansion of Namarei Water Pan
- b) Rehabilitation of Olturot water Supply
  - Extension of water supply pipelines (3030m) of various sizes
  - Rehabilitation of Masonry tank (100m³)
  - Construction of 2No livestock troughs
  - Construction of 2No Water Kiosks
  - Construction of 12m high elevated steel tank (100m³)
  - Pump Installation and Solarization.
  - Construction of 6m High Elevated steel tower and Installation of 10m<sup>3</sup> Plastic tank.
- c) Rehabilitation of Ngororoi water Supply
  - Extension of water supply pipelines (3100m) of various sizes
  - Rehabilitation of 5 No Masonry tanks of various sizes.
  - Construction of spring box and Intake
  - Rehabilitation of 2No livestock troughs
  - Rehabilitation of Farm pipeline (300m)
- d) Construction of 2 blocks of 3 door VIP latrines
- 1. Tendering will be conducted under open tendering (National) using a standardized tender document. Tendering is open to all qualified contractors.
- 2. Qualified and interested tenderers may obtain further information and inspect the Tender Documents during office hours 8:00am-4:30pm at the address given below.
- 3. Tender documents may be viewed and downloaded for free from the website <u>marsabit.go.ke</u> and <u>www.tenders.go.ke</u> Tenderers who download the tender document must forward their particulars immediately to <u>nairobi.tenders@concern.net</u> to facilitate any further clarification or addendum.
- 4. Tenders shall be quoted be in Kenya Shillings and shall include all taxes. Tenders shall remain valid for **126 days** from the date of opening of tenders.
- 5. All Tenders must be accompanied by a tender Security or bank guarantee of Ksh. 650,000 (Six Hundred and fifty thousand only) valid for 156 days as per the tender data sheet.
- 6. The Tenderer shall chronologically serialize all pages of the tender documents submitted.
- 7. Completed tenders must be delivered to the address below on or before 4th January, 2024 at 11am. Electronic Tenders will not be permitted.
- 8. Tenders will be opened immediately after the deadline date and time specified above or any dead line date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives who choose to attend at the address below.
- 9. Late tenders will be rejected.
- 10. The addresses referred to above are:

The Procurement Office WORLDWIDE CONCERN P.O. Box 13850-00800 Nairobi, Kenya



#### SECTION I: INSTRUCTIONS TO TENDERERS

#### A General Provisions

#### 1. Scope of Tender

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

## 2. Fraud and Corruption

- 2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.
- 2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding <u>collusive</u> <u>practices</u> in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.
- 2.3 Unfair Competitive Advantage Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.
- 2.4 Unfair Competitive Advantage -Fairness and transparency in the tender process require that the Firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender being tendered for. The Procuring Entity shall indicate in the **TDS** firms (if any) that provided consulting services for the contract being tendered for. The Procuring Entity shall check whether the owners or controllers of the Tenderer are same as those that provided consulting services. The Procuring Entity shall, upon request, make available to any tenderer information that would give such firm unfair competitive advantage over competing firms.

# 3. Eligible Tenderers

- 3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.7 or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. Public employees and their close relatives (*spouses*, *children*, *brothers*, *sisters and uncles and aunts*) are not eligible to participate in the tender. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. The maximum number of JV members shall be specified in the **TDS**.
- 3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.
- 3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:
  - a) Directly or indirectly controls, is controlled by or is under common control with another tenderer; or
  - b) Receives or has received any direct or indirect subsidy from another tenderer; or
  - c) Has the same legal representative as another tenderer; or
  - d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position

- to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process; or
- e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender; or
- f) any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity as Engineer for the Contract implementation; or
- g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document or
- h) Has a close business or family relationship with a professional staff of the Procuring Entity who:
  - i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or
  - would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.
- 3.4 A tenderer shall not be involved in corrupt, coercive, obstructive, collusive or fraudulent practice. A tenderer that is proven to have been involved any of these practices shall be automatically disqualified.
- 3.5 A Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative tenders. This includes participation as a subcontractor in other Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender.
- 3.6 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT 4.8.A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
- 3.7 Tenderer that has been debarred from participating in public procurement shall be ineligible to tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.
- 3.8 Tenderers that are state-owned enterprises or institutions may be eligible to compete and be awarded a Contract(s) only if they are accredited by PPRA to be (i) a legal public entity of the state Government and/or public administration, (ii) financially autonomous and not receiving any significant subsidies or budget support from any public entity or Government, and (iii) operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.
- 3.9 A Firms and individuals may be ineligible if their countries of origin (a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country, or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.
- 3.10 Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, subcontracts and labor) from national suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable the Procuring Entity determine if this condition is met shall be provided in for this purpose is be provided in "SECTION III EVALUATION AND QUALIFICATION CRITERIA, Item 9".
- 3.11 Pursuant to the eligibility requirements of ITT 4.10, a tender is considered a foreign tenderer, if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has less than 51 percent ownership by Kenyan

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

- 3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.
- 3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the website www.cak.go.ke
- 3.14 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

# 4. Eligible Goods, Equipment, and Services

- 4.1 Goods, equipment and services to be supplied under the Contract may have their origin in any country that is not eligible under ITT 3.9. At the Procuring Entity's request, Tenderers may be required to provide evidence of the origin of Goods, equipment and services.
- 4.2 Any goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

#### 5. Tenderer's Responsibilities

- 5.1 The tenderer shall bear all costs associated with the preparation and submission of his/her tender, and the Procuring Entity will in no case be responsible or liable for those costs.
- 5.2 The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the tenderer's own expense.
- 5.3 The Tenderer and any of its personnel or agents will be granted permission by the Procuring Entity to enter upon its premises and lands for the purpose of such visit. The Tenderer shall indemnify the Procuring Entity against all liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred as a result of the inspection.
- 5.4 The tenderer shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including charts, as necessary or required.

#### **B.** Contents of Tender Documents

#### 6. Sections of Tender Document

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

#### **PART 1 Tendering Procedures**

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

## **PART 2 Works Requirements**

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

#### **PART 3 Conditions of Contract and Contract Forms**

- i) Section VIII General Conditions of Contract (GCC)
- ii) Section IX Special Conditions of Contract (SC)
- iii) Section X Contract Forms
- 6.2 The Invitation to Tender Document (ITT) issued by the Procuring Entity is not part of the Contract documents.
- 6.3 Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 8. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

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

#### 7. Site Visit

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

# 8. Pre-Tender Meeting

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

#### 9. Clarification and amendments of Tender Documents

9.1 A Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the Procuring Entity's address specified in the **TDS** or raise its enquiries during the pre-Tender meeting and the pre-arranged pretender visit of the site of the works if provided for in accordance with ITT 8.4. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received no later than the period

specified in the **TDS** prior to the deadline for submission of tenders. The Procuring Entity shall forward copies of its response to all tenderers who have acquired the Tender Documents in accordance with ITT 6.3, including a description of the inquiry but without identifying its source. If specified in the **TDS**, the Procuring Entity shall also promptly publish its response at the web page identified in the **TDS**. Should the clarification result in changes to the essential elements of the Tender Documents, the Procuring Entity shall amend the Tender Documents appropriately following the procedure under ITT 8.4.

# 10. Amendment of Tendering Document

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

## C. Preparation of Tenders

#### 11. Cost of Tendering

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

## 12. Language of Tender

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

## 13. Documents Comprising the Tender

- 13.1 The Tender shall comprise the following:
  - a) Form of Tender prepared in accordance with ITT 14;
  - b) Schedules including priced Bill of Quantities, completed in accordance with ITT 14 and ITT 16;
  - c) Tender Security or Tender-Securing Declaration, in accordance with ITT 21.1;
  - d) Alternative Tender, if permissible, in accordance with ITT 15;
  - e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 22.3;
  - f) Qualifications: documentary evidence in accordance with ITT 19establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted;
  - g) Conformity: a technical proposal in accordance with ITT 18;
  - h) Any other document required in the **TDS**.
- 13.2 In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender,

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

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

#### 14. Form of Tender and Schedules

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

#### 15. Alternative Tenders

- 15.1 Unless otherwise specified in the **TDS**, alternative Tenders shall not be considered.
- 15.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the **TDS**, and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.
- 15.3 Except as provided under ITT 13.4 below, Tenderers wishing to offer technical alternatives to the requirements of the Tender Documents must first price the Procuring Entity's design as described in the Tender Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Procuring Entity, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the Winning Tender conforming to the basic technical requirements shall be considered by the Procuring Entity. When specified in the **TDS**, Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in the **TDS**, as will the method for their evaluating, and described in Section VII, Works' Requirements.

#### 16. Tender Prices and Discounts

- 16.1 The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Bill of Quantities shall conform to the requirements specified below.
- 16.2 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Tenderer shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Procuring Entity. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.
- 16.3 The price to be quoted in the Form of Tender, in accordance with ITT 14.1, shall be the total price of the Tender, including any discounts offered.
- 16.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 14.1.
- 16.5 It will be specified in the **TDS** if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, except in cases where the contract is subject to <u>fluctuations and adjustments</u>, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Procuring Entity may require the Tenderer to justify its proposed indices and weightings.
- 16.6 Where tenders are being invited for individual lots (contracts) or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 16.4, provided the Tenders for all lots (contracts) are opened at the same time.

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

#### 17. Currencies of Tender and Payment

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

#### 18. Documents Comprising the Technical Proposal

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

# 19. Documents Establishing the Eligibility and Qualifications of the Tenderer

- 19.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.
- 19.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.
- 19.3 A margin of preference will not be allowed. Preference and reservations will be allowed, individually or in joint ventures. Applying for eligibility for Preference and reservations shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.
- 19.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the Procuring Entity, a contractor or group of contractors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.
- 19.5 The purpose of the information described in ITT 19.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.
- 19.6 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 6.3. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.
- 19.7 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.
- 19.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.
- 19.9 If information submitted by a tenderer pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which

could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:

- i) if the procurement process is still ongoing, the tenderer will be disqualified from the procurement process,
- ii) if the contract has been awarded to that tenderer, the contract award will be set aside,
- the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.
- 19.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 6.7 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

#### 20. Period of Validity of Tenders

- 20.1 Tenders shall remain valid for the Tender Validity period specified in the **TDS**. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 24). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.
- 20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 21.1, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 20.3.
- 20.3 If the award is delayed by a period exceeding the number of days to be specified in the **TDS** days beyond the expiry of the initial tender validity period, the Contract price shall be determined as follows:
  - a) in the case of **fixed price** contracts, the Contract price shall be the tender price adjusted by the factor specified in the **TDS**;
  - b) in the case of **adjustable price** contracts, no adjustment shall be made; or in any case, tender evaluation shall be based on the tender price without taking into consideration the applicable correction from those indicated above.

# 21. Tender Security

- 21.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the **TDS**, in original form and, in the case of a Tender Security, in the amount and currency specified in the **TDS**. A Tender-Securing Declaration shall use the form included in Section IV, Tender Forms.
- 21.2 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:
  - a) an unconditional Bank Guarantee issued by reputable commercial bank); or
  - b) an irrevocable letter of credit;
  - c) a Banker's cheque issued by a reputable commercial bank; or
  - d) another security specified in the TDS,
- 21.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 20.2.
- 21.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by the Procuring Entity as non-responsive.
- 21.5 If a Tender Security is specified pursuant to ITT 21.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the **TDS**. The Procuring Entity shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were

determined nonresponsive or a bidder declines to extend tender validity period.

- 21.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the **TDS**.
- 21.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:
  - e) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereto provided by the Tenderer; or
  - f) if the successful Tenderer fails to:
    - i) sign the Contract in accordance with ITT 50; or
    - ii) furnish a Performance Security and if required in the **TDS**, and any other documents required in the **TDS**.
- 21.8 Where tender securing declaration is executed, the Procuring Entity shall recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.
- 21.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.
- 21.10A tenderer shall not issue a tender security to guarantee itself.

# 22. Format and Signing of Tender

- 22.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 13 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 15, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number specified in the **TDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 22.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 22.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the **TDS** and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.
- 22.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 22.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Tender.

# **D.** Submission and Opening of Tenders

- 23. Sealing and Marking of Tenders
- 23.1 Depending on the sizes or quantities or weight of the tender documents, a tenderer may use an envelope, package or container. The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:
  - a) in an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as described in ITT 11; and

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

The inner envelopes or packages or containers shall:

- a) bear the name and address of the Procuring Entity.
- b) bear the name and address of the Tenderer; and
- c) bear the name and Reference number of the Tender.
- 23.2 If an envelope or package or container is not sealed and marked as required, the *Procuring Entity* will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

#### 24. Deadline for Submission of Tenders

- 24.1 Tenders must be received by the Procuring Entity at the address specified in the **TDS** and no later than the date and time also specified in the **TDS**. When so specified in the **TDS**, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the **TDS**.
- 24.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the Tender Documents in accordance with ITT 8, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

#### 25. Late Tenders

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

#### 26. Withdrawal, Substitution, and Modification of Tenders

- 26.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 22.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:
  - a) prepared and submitted in accordance with ITT 22 and ITT 23 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
  - b) received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 24.
- 26.2 Tenders requested to be withdrawn in accordance with ITT 26.1 shall be returned unopened to the Tenderers.
- 26.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

#### 27. Tender Opening

- 27.1 Except in the cases specified in ITT 23 and ITT 26.2, the Procuring Entity shall publicly open and read out all Tenders received by the deadline, at the date, time and place specified in the **TDS**, in the presence of Tenderers' designated representatives who chooses to attend. Any specific electronic Tender opening procedures required if electronic Tendering is permitted in accordance with ITT 24.1, shall be as specified in the **TDS**.
- 27.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelopes with the corresponding Tender shall not be opened, but returned to the Tenderer. No Tender withdrawal shall be permitted

- unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.
- 27.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.
- 27.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.
- 27.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as the Procuring Entity may consider appropriate.
- 27.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bills of Quantities are to be initialed by the members of the tender opening committee attending the opening. The number of representatives of the Procuring Entity to sign shall be specified in the **TDS**.
- 27.7 At the Tender Opening, the Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 25.1).

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

- a) the name of the Tenderer and whether there is a withdrawal, substitution, or modification;
- b) the Tender Price, per lot (contract) if applicable, including any discounts;
- c) any alternative Tenders;
- d) the presence or absence of a Tender Security, if one was required.
- e) number of pages of each tender document submitted.
- 27.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of the tender opening register shall be distributed to all Tenderers upon request.

#### E. Evaluation and Comparison of Tenders

#### 28. Confidentiality

- 28.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 46.
- 28.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.
- 28.3 Notwithstanding ITT 28.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact the Procuring Entity on any **matter related to the tendering process, it shall do so in writing.**

#### 29. Clarification of Tenders

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

#### 30. Deviations, Reservations, and Omissions

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

# 31. Determination of Responsiveness

- 31.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the tender itself, as defined in ITT 13.
- 31.2 A substantially responsive Tender is one that meets the requirements of the Tender document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that, if accepted, would:
  - a) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
  - b) limit in any substantial way, inconsistent with the tender document, the Procuring Entity's rights or the tenderer's obligations under the proposed contract; or
  - c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.
- 31.3 The Procuring Entity shall examine the technical aspects of the tender submitted in accordance with ITT 18, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
- 31.4 If a tender is not substantially responsive to the requirements of the tender document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

#### 32. Non-material Non-conformities

- 32.1 Provided that a tender is substantially responsive, the Procuring Entity may waive any non-conformities in the tender.
- 32.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the tenderer submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial non-conformities in the tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.
- 32.3 Provided that a tender is substantially responsive, the Procuring Entity shall rectify quantifiable nonmaterial non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the **TDS**.

#### 33. Arithmetical Errors

- 33.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in any way by any person or entity.
- 33.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle errors on the following basis:
  - a) Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.

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

## 34. Currency provisions

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

#### 35. Margin of Preference and Reservations

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

#### **36.** Nominated Subcontractors

- 36.1 Unless otherwise stated in the **TDS**, the Procuring Entity does not intend to execute any specific elements of the Works by subcontractors selected in advance by the Procuring Entity.
- 36.2 Tenderers may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the **TDS**. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.
- 36.3 The subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated by the Procuring Entity in the **TDS** as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Tenderer may be added to the qualifications of the Tenderer.

#### 37. Evaluation of Tenders

- 37.1 The Procuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Procuring Entity shall determine the Best Evaluated Tender in accordance with ITT 40.
- 37.2 To evaluate a Tender, the Procuring Entity shall consider the following:
  - a) price adjustment due to discounts offered in accordance with ITT 16;
  - b) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT39;
  - c) price adjustment due to quantifiable nonmaterial non-conformities in accordance with ITT 30.3; and
  - d) any additional evaluation factors specified **in the TDS** and Section III, Evaluation and Qualification Criteria.
- 37.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in Tender evaluation.
- 37.4 In the case of multiple contracts or lots, Tenderers shall be allowed to tender for one or more lots and the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the **Form** of Tender, is specified in Section III, Evaluation and Qualification Criteria.

#### 38. Comparison of Tenders

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

#### 39. Abnormally Low Tenders

- 39.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.
- 39.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.
- 39.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

## 40. Abnormally High Tenders

- 40.1 An abnormally high price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that the Procuring Entity is concerned that it (the Procuring Entity) may not be getting value for money or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.
- 40.2 In case of an abnormally high tender price, the Procuring Entity shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. The Procuring Entity may also seek written clarification from the tenderer on the reason for the high tender price. The Procuring Entity shall proceed as follows:
  - i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.
  - ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.
- 40.3 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (often due to collusion, corruption or other manipulations), the Procuring Entity shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

#### 41. Unbalanced and/or Front-Loaded Tenders

- 41.1 If in the Procuring Entity's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or front loaded, the Procuring Entity may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the tender prices with the scope of works, proposed methodology, schedule and any other requirements of the Tender document.
- 41.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, the Procuring Entity may as appropriate:
  - a) accept the Tender; or
  - b) require that the total amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding a 30% of the Contract Price; or
  - c) agree on a payment mode that eliminates the inherent risk of the Procuring Entity paying too much for undelivered works; or
  - d) reject the Tender,

## 42. Qualifications of the Tenderer

- 42.1 The Procuring Entity shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 42.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 19. The determination shall not take into consideration

the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.

- 42.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.
- 42.4 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price.
- 42.5 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.
- 42.6 After evaluation of the price analyses, if the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

#### 43. Best Evaluated Tender

- 43.1 Having compared the evaluated prices of Tenders, the Procuring Entity shall determine the Best Evaluated Tender. The Best Evaluated Tender is the Tender of the Tenderer that meets the Qualification Criteria and whose Tender has been determined to be:
  - a) Most responsive to the Tender document; and
  - b) the lowest evaluated price.

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

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

#### F. Award of Contract

#### 45. Award Criteria

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

#### 46. Notice of Intention to enter into a Contract

- 46.1 Upon award of the contract and Prior to the expiry of the Tender Validity Period the Procuring Entity shall issue a Notification of Intention to Enter into a Contract / Notification of award to all tenderers which shall contain, at a minimum, the following information:
  - a) the name and address of the Tenderer submitting the successful tender;
  - b) the Contract price of the successful tender;
  - c) a statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in (c) above already reveals the reason;
  - d) the expiry date of the Standstill Period; and
  - e) instructions on how to request a debriefing and/or submit a complaint during the standstill period;

#### 47. Standstill Period

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

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

# 48. Debriefing by the Procuring Entity

- 48.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 46, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request.
- 48.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending **such a debriefing meeting.**

#### 49. Letter of Award

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

#### 50. Signing of Contract

- 50.1 Upon the expiry of the fourteen days of the Notification of Intention to enter into contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.
- 50.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.
- 50.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period

## 51. Appointment of Adjudicator

51.1 The Procuring Entity proposes the person named in the **TDS** to be appointed as Adjudicator under the Contract, at the hourly fee specified in the **TDS**, plus reimbursable expenses. If the Tenderer disagrees with this proposal, the Tenderer should so state in his Tender. If, in the Letter of Acceptance, the Procuring Entity does not agree on the appointment of the Adjudicator, the Procuring Entity will request the Appointing Authority designated in the Special Conditions of Contract (SCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

## **52.** Performance Security

- 52.1 Within twenty-one (21) days of the receipt of the Letter of Acceptance from the Procuring Entity, the successful Tenderer shall furnish the Performance Security and, any other documents required in the **TDS**, in accordance with the General Conditions of Contract, subject to ITT 40.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to the Procuring Entity. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent bank is not required.
- 52.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the **TDS**, or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Best Evaluated Tender.
- 52.3 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings.

## 53. Publication of Procurement Contract

- 53.1 Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:
  - a) name and address of the Procuring Entity;
  - b) name and reference number of the contract being awarded, a summary of its scope and the selection method used;
  - c) the name of the successful Tenderer, the final total contract price, the contract duration.
  - d) dates of signature, commencement and completion of contract;
  - e) names of all Tenderers that submitted Tenders, and their Tender prices as read out at Tender opening.

# 54. Procurement Related Complaints and Administrative Review

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

# **Section II - Tender Data Sheet (TDS)**

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

ITT Reference			
	A. General		
ITT 1.1	The name of the contract is_LAISAMIS INTEGRATED PROJECT: Desiltation and expansion of Namarei water pan, Rehabilitation of Ngororoi water supply and Rehabilitation of Olturot water supply and construction of VIP latrines.		
	The reference number of the Contract is_ CONCERN/101510/2023/12		
	The number and identification of bills comprising this Tender are;		
	Namarei Water Pan     Desilting and expansion of Namarei Water Pan     Construction of water abstraction system     Fencing		
	<ul> <li>2: Olturot Water Supply</li> <li>Pipeline extension (3030m) of various sizes</li> <li>Rehabilitation of Masonry tank (100m³)</li> <li>Construction of 2 No Livestock troughs</li> <li>Construction of 12m high elevated steel tank (100m³)</li> <li>Pump Installation and Solarization</li> <li>Construction of 6m High elevated steel tower and installation of 10m³ plastic tank</li> <li>3: Ngororoi Water supply Project.</li> <li>Pipeline extension (3100m) of various sizes</li> <li>Rehabilitation of 5 No Masonry tanks of various sizes.</li> <li>Construction of spring box and Intake</li> <li>Rehabilitation of 2No Livestock troughs</li> <li>Rehabilitation of Farm pipeline (300m)</li> </ul>		
	4. Construction Of 2 Blocks Of 3-Door VIP Latrines At Guram Primary School (one 3-door for boys and one other for girls)		
ITT 2.4	The firms that provided consulting services for the contract being tendered for are:  Not Applicable		
ITT 3.1	Maximum number of members in the Joint Venture (JV) shall be: JV Not applicable		
B. Contents of T	Tender Document		
8.1	A pre-arranged pretender visit of the site of the works shall take place at the following date, time and place:		
	MANDATORY SITE VISIT  Date: 29th December, 2023  Time: 9 AM  Place: LAISAMIS TOWN		
	Contact person: Evans Nyagwaya		

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS			
11 1 Hererence	Tel: 0727784581			
ITT 8.2	The Tenderer will submit any questions in writing, to reach the Procuring Entity			
111 6.2	not later than 3 days before the opening date.			
ITT 8.4	The Procuring Entity's website where Minutes of the pre-Tender meeting and the			
	pre-arranged pretender site visit will be published is Concern World Wide			
	Website.			
ITT 9.1	For Clarification of Tender purposes, for obtaining further information and for purchasing tender documents, the Procuring Entity's address is:			
	The Procurement Office- nairobi.tenders@concern.net			
	CONCERN WORLDWIDE			
	P.O. Box 13850-00800			
	Nairobi, Kenya			
C. Preparation				
ITP 13.1 (h)	The Tenderer shall submit the following additional documents in its Tender: <b>Not Applicable</b>			
ITT 15.1	Alternative Tenders shall not be considered.			
ITT 15.2	Alternative times for completion <i>shall not</i> be permitted.			
ITT 15.4	Alternative technical solutions shall be permitted for the following parts of the Works:  [insert parts of the Works]:			
	Works: [insert parts of the Works]:  [If alternative technical solutions are permitted, the evaluation method will be as			
	specified in Section III, Evaluation and Qualification Criteria.] Not Applicable			
ITT 16.5	The prices quoted by the Tenderer shall be: "fixed"			
ITT 20.1	The Tender validity period shall be <b>126</b> .			
ITT 21.1	A Tender Security shall be required.			
	If a Tender Security shall be required, the amount and currency of the Tender Security shall be <b>Ksh. 650,000</b> in form of  a) cash, b) a bank guarantee;			
	c) a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority; or d) a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya  The tender security shall be valid for <b>156</b> days from the date of tender opening			
ITT 21.2 (d)	The other Tender Security shall be <b>Not Applicable</b>			
ITT 21.5	·			
11 1 21.5	On the Performance Security, other documents required shall be As per the Specific conditions of the contract			
ITT 22.1	In addition to the original of the Tender, the number of copies is: ONE ORIGINAL & ONE COPY			
ITT 22.3	The written confirmation of authorization to sign on behalf of the Tenderer shall consist of <b>Power of Attorney</b>			
D. Submission a	nd Opening of Tenders			
ITT 24.1	(A) For <u>Tender submission purposes</u> only, the Procuring Entity's address is:			
	Hand delivery to Tender box CONCERN WORLDWIDE			
	P.O. Box 13850-00800			
	Nairobi, Kenya			
	Date and time for submission of Tenders 4 <sup>th</sup> January, 2024, 11AM.			
	Tenders shall NOT submit tenders electronically.			

ITT Reference PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS			
ITT 27.1	The Tender opening shall take place at the time and the address for Opening of		
	Tenders provided below:		
	CONCERN WORLDWIDE		
	P.O. Box 13850-00800		
	Nairobi, Kenya		
	State date and time of tender opening. 4th January, 2024, 11 AM		
	If Tenderers are allowed to submit Tenders electronically, they shall follow the		
	electronic tender submission procedures Not Aplicable		
ITT 27.6	The number of representatives of the Procuring Entity to sign is two		
	nd Comparison of Tenders		
ITT 35.2	The invitation to tender is extended to the following groups that qualify for : No		
	reservations. Open to all		
ITT 36.1	At this time, the Procuring Entity does not intend to execute certain specific parts of		
the Works by subcontractors selected in advance.			
ITT 37.2 (d)	Additional requirements apply. These are detailed in the evaluation criteria in		
Section III, Evaluation and Qualification Criteria.			
ITT 51.1	The person named to be appointed as Adjudicator. As per the Kenyan Laws		
ITT 54.1	The procedures for making a Procurement-related Complaints are detailed in the "Regulations" available from the PPRA Website <a href="www.ppra.go.ke">www.ppra.go.ke</a> or email <a href="complaints@ppra.go.ke">complaints@ppra.go.ke</a> . If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by hand delivery or "".").		
	email to: CONCERN WORLDWIDE		
	P.O. Box 13850-00800		
	Nairobi, Kenya		
	Email address: nairobi.tenders@concern.net		
	In summary, a Procurement-related Complaint may challenge any of the following:		
	(i) the terms of the Tender Documents; and		
	(ii) the Procuring Entity's decision to award the contract.		

## SECTION III - EVALUATION AND QUALIFICATION CRITERIA

#### 1. General Provisions

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

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

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

#### **Evaluation and contract award Criteria**

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

# 2. Preliminary examination for Determination of Responsiveness

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

# Stage 1: Preliminary Bid Responsiveness Assessment

This will involve assessing whether bidders for works have complied with submission requirements and have also attached certified copies of mandatory eligibility and statutory documents. Evaluation at this stage will be conducted on **Yes/No**, and bidders are expected to show evidence of ALL required items to proceed to the next stage of evaluation.

Mand	latory Requirements	Yes/No
Eligib	ility and Statutory Documents: MANDATORY	
a)	Tender security from Bank guarantee or Insurance Company approved by PPRA amounting <b>Ksh. 650,000</b> valid for 156 days as indicated in the tender data sheet.	
b)	Audit financial reports: (2020 – 2022)	
c)	1, 0	
d)	Site visit certificate stamped and issued by Concern World Wide	
e)	Dully filled, signed and stamped form of tender in a letterhead as per the form provided in the tender document	
f)	One original and one copy of the tender document properly paginated and serialized including attachments.	
g)	Valid Tax Compliance certificate (TCC)	
h)	Certified Copy of Valid and current Business Permit	
i)	Disclosure of business ownership (Directors/ Partners /Sole Proprietor). Attach a copy of CR12 Form (Latest within 6 months)	
j)	Certified copy of National Construction Authority (NCA) registration Certificate	
•	for Class 6 and above which must be in electrical, building and Water works Category	
k)	Registration with ministry of Water as qualified water works contractor	
1)	EPRA certificate for the Electromechanical Engineer/Technician	
	Dully filled and signed certificate of independence determination	
,	Dully filled and signed SD1 form: Self Declaration that the person/tenderer is not	
	debarred in the matter of the Public Procurement and Asset Disposal Act, 2015	
o)	Dully filled and signed SD2 form: Self Declaration that the person/tenderer will	
,	not engage in any corrupt or fraudulent practice.	
p)	Dully filled and signed declaration and commitment to the code of ethics as	
	provided in the tender document.	

# BIDDERS WHO WILL NOT SHOW EVIDENCE OF ALL REQUIRED ITEMS WILL NOT PROCEED TO THE NEXT STAGE OF TECHNICAL EVALUATION

# **Stage 2: Technical Evaluation Stage**

Bids will be evaluated to ensure that they are technically responsive to the technical specifications and contract conditions stated in the Tender Document.

The determination of a bidder's technical responsiveness will be based on the contents of the tender itself, subject to any clarifications received in the preliminary examination of Tenders. Items of this evaluation will be scored.

No. DESCRIPTION			POINT SCORE SCALE	
1.	Max 30			
1.1 Value of related water works handled in Kshs			15	
	a) Three projects of equal or higher value in the last three years.			
b	value	Any three (3No) projects of value between 50 % and 100% of value		
С	) Any projects	between 30-50% value of the tendered works.	6	
d	) No submission	on of project record/below 30% value	0	
	completions	scope and specificity of water works handled- certificates only allowed		
a		Five projects of similar nature as per this scope of works (2 Water pans, 2 Borehole equipping/Solarization, 1 building		
b	complexity	Any three (3No) projects of related nature but not same		
С		0		
2.	KEY PERSO	ONNEL	Max 20	
	Technical skill in terms of human resource. Attach CVs and certified copies of academic certificates detailing qualifications of at least (3) key personnel who shall be involved in this assignment.  The persons must be working with the organization or sign an undertaking to work with the firm by the time of submitting this tender. Each of the 3 personnel will be evaluated on the following parameters:			
a	) Project	Degree Civil engineering.	2	
	Manager/ Site Agent 10 years' experience			
	Registration with relevant professional body (EBK) at least Graduate Engineer			
Engineer  EPRA certification of the Electrical Engineer/Technician			5	

b)	Foreman	Diploma/Certificate in building works/Mason.	2
		3 years' experience	2
		Registration with relevant	
		professional body (NCA)	1
3.	PLANT AN	D EQUIPMENT	Max 15
	Relevant	Showing evidence of ownership	10
	Equipment	Owned/Leased	
		Listing the required equipment point for each equipment, maximum of five)	5
		Bulldozer is key in the said works and lorries	
4.	WORK ME	THODOLOGY	Max 10
	Detailed Pro	gramme of works	5
	Methodology	on safety during the construction period.	5
5.	FINANCIA	L CAPACITY	Max 25
	_	ge annual Turnover of the last 3 years, which must we this contract amount.	10
	b) Eviden	ce of Line of credit or indication of self-financing	15
	То	tal Marks	100

The technical evaluation pass mark shall be 70% of which bidders who pass will be subjected to tender price comparisons. Award of the Contract will be to the bidder whose bid is determined to be technically responsive to the tender and who has offered the lowest evaluated tender price. Bidders who shall score below 70% will be discontinued from further evaluation

# **Stage 3: Financial Evaluation Stage**

Award the Contract to the bidder whose bid is determined to be technically responsive to the tender documents and who has offered the lowest evaluated tender price.

3.	Teno	ler Eva	aluation (ITT 35) Price evaluation: in addition to the criteria listed in ITT 35.2 (a) – (c) the following		
	criter i)	Alter	lapply: rnative Completion Times, if permitted under ITT 13.2, will be evaluated as follows:		
	ii)		rnative Technical Solutions for specified parts of the Works, if permitted under ITT 13.4, will be nated as follows:		
	iii)	Othe	er Criteria; if permitted under ITT 35.2(d):		
		•••••			
4.	. Multiple Contracts				
	Multiple contracts will be permitted in accordance with ITT 35.4. Tenderers are evaluated on basis of Lots at the lowest evaluated tenderer identified for each Lot. The Procuring Entity will select one Option of the to Options listed below for award of Contracts.				
	ОРТ	ION 1			
	i)	If a te	enderer wins only one Lot, the tenderer will be awarded a contract for that Lot, provided the tenderer is the Eligibility and Qualification Criteria for that Lot.		
ii)	meet com	s the a	r wins more than one Lot, the tender will be awarded contracts for all won Lots, provided the tenderer aggregate Eligibility and Qualification Criteria for all the Lots. The tenderer will be awarded the n of Lots for which the tenderer qualifies and the others will be considered for award to second lowest s.		
	<u>OP1</u>	ION 2			
	com	oinatio oinatio	ring Entity will consider all possible combinations of won Lots [contract(s)] and determine the ns with the lowest evaluated price. Tenders will then be awarded to the Tenderer or Tenderers in the ns provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won		
5.	Alte	rnative	e Tenders (ITT 13.1)		
	An alternative if permitted under ITT 13.1, will be evaluated as follows:				
	The Procuring Entity shall consider Tenders offered for alternatives as specified in Part 2- Works Requirements. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by the Procuring Entity.				
6.	Mar	gin of l	Preference is not applicable		
7.	Post	aualifi	ication and Contract ward (ITT 39), more specifically,		
	a)	In cas	se the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated erer, subject to confirmation of pre-qualification data, if so required.		
	b)	In cas	se the tender was not subject to post-qualification, the tender that has been determined to be the lowest lated tenderer shall be considered for contract award, subject to meeting each of the following		
		condi i)	itions.  The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance pay ment) sufficient to meet the construction cash flow of Kenya Shillings		
		ii)	Minimum <u>average</u> annual construction turnover of Kenya Shillings[insert amount], equivalent calculated as total certified payments received for contracts in progress and/or completed within the last[insert of year] years.		
		iii)	At least(insert number) of contract(s) of a similar nature executed within Kenya, or the East African Community or abroad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value Kenya		
		iv)	shillings equivalent.  Contractor's Representative and Key Personnel, which are specified as		

- v) Contractors key equipment listed on the table "Contractor's Equipment" below and more specifically listed as [specify requirements for each lot as applicable]
- vi) Other conditions depending on their seriousness.

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

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

## b) **Pending Litigation**

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

#### c) Litigation History

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

# 8. QUALIFICATION FORM SUMMARY

1	2	3	4	5
Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
1	Nationality	Nationality in accordance with ITT 3.6	Forms ELI – 1.1 and 1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority in accordance with ITT 3.14.	Form of Tender	
3	Conflict of Interest	No conflicts of interest in accordance with ITT 3.3	Form of Tender	
4	PPRA Eligibility	Not having been declared ineligible by the PPRA as described in ITT 3.8	Form of Tender	
5	State- owned Enterprise	Meets conditions of ITT 3.7	Forms ELI – 1.1 and 1.2, with attachments	
6	Goods, equipment and services to be supplied under the contract	To have their origin in any country that is not determined ineligible under ITT 4.1	Forms ELI – 1.1 and 1.2, with attachments	
7	History of Non- Performing Contracts	Non-performance of a contract did not occur as a result of contractor default since 1 <sup>st</sup> January [].	Form CON-2	
8	Suspension Based on Execution of Tender/Proposal Securing Declaration by the Procuring Entity	Not under suspension based on-execution of a Tender/Proposal Securing Declaration pursuant to ITT 19.9	Form of Tender	
9	Pending Litigation	Tender's financial position and prospective long-term profitability still sound according to criteria established in 3.1 and assuming that all pending litigation will NOT be resolved against the Tenderer.	Form CON – 2	
10	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer since 1 <sup>st</sup> January [insert year]	Form CON – 2	
11	Financial Capabilities	(i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as Kenya Shillings [insert amount] equivalent for the subject contract(s) net of the Tenderer's other commitments.	Form FIN – 3.1, with attachments	
		(ii) The Tenderers shall also demonstrate, to the satisfaction		

1	2	3	4	5
Item No.	Qualification Subject	Qualification Requirement	Document To be Completed by Tenderer	For Procuring Entity's Use (Qualification met or Not Met)
		of the Procuring Entity, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.		
		(iii) The audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Procuring Entity, for the last [insert number of years] years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.		
12	Average Annual Construction Turnover	Minimum average annual construction turnover of Kenya Shillings [insert amount], equivalent calculated as total certified payments received for contracts in progress and/or completed within the last [insert of year] years, divided by [insert number of years] years	Form FIN – 3.2	
13	General Construction Experience	Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last [insert number of years] years, starting 1st January [insert year].	Form EXP – 4.1	
	Specific Construction & Contract Management Experience	A minimum number of [state the number] similar contracts specified below that have been satisfactorily and substantially completed as a prime contractor, joint venture member, management contractor or sub-contractor between 1st January [insert year] and tender submission deadline i.e (number) contracts, each of minimum value Kenya shillings equivalent.  [In case the Works are to be tender as individual contracts under multiple contract procedure, the minimum number of contracts required for purposes of evaluating qualification shall be selected from the options mentioned in ITT 35.4]	Form EXP 4.2(a)	
		The similarity of the contracts shall be based on the following: [Based on Section VII, Scope of Works, specify the minimum key requirements in terms of physical size,		

1	2	3	4	5
Item	Qualification Subject	Qualification Requirement	Document To be Completed	For Procuring Entity's
No.			by Tenderer	Use (Qualification met or
				Not Met)
		complexity, construction method, technology and/or other		
		characteristics including part of the requirements that may		
		be met by specialized subcontractors, if permitted in		
		accordance with ITT 34.3]		

### **QUALIFICATION FORMS**

### 1. FORM EQU: EQUIPMENT

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

Item of equipment					
rom or oquipm					
Equipment	Name of manufactu	irer		Model and power rating	
information				8	
IIIIOIIIIatioii					
	Capacity			Year of manufacture	
	1 2				
~					
Current status	Current location				
	Data ila af assument as				
	Details of current co	ommitments			
Source	Indicate source of the	ne equipment			
		☐ Rented	☐ Leased	☐ Specially manufactured	
		- Kenteu	Leaseu	Specially manufactured	

Omit the following information for equipment owned by the Tenderer.

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

### 2. FORM PER-1

### Contractor's Representative and Key Personnel Schedule

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

### **Contractor' Representative and Key Personnel**

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

### **3. FORM PER-2:**

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

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

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

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

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

#### **Declaration**

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

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

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

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

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

Name of Contractor's Representative or Key Personnel: [insert name]	
Signature:	
Date: (day month year):	Countersignature
of authorized representative of the Tenderer:	
Signature:	Date: (day month
year):	

### 4. TENDERER'S QUALIFICATION WITHOUT PRE-QUALIFICATION

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

### 4.1 FORM ELI -1.1

Tenderer Information Form
Date:
ITT No. and title:
Tenderer's name
In case of Joint Venture (JV), name of each member:
Tenderer's actual or intended country of registration:
[indicate country of Constitution]
Tenderer's actual or intended year of incorporation:
Tenderer's legal address [in country of registration]:
Tenderer's authorized representative information
Name:
Address:
Telephone/Fax numbers:
E-mail address:
1. Attached are copies of original documents of
Articles of Incorporation (or equivalent documents of constitution or association), and/or
documents of registration of the legal entity named above, in accordance with ITT 3.6
☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5
☐ In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents
establishing:
Legal and financial autonomy
Operation under commercial law
• Establishing that the Tenderer is not under the supervision of the Procuring Entity
2. Included are the organizational chart and a list of Board of Directors.

### 4.2 <u>FORM ELI -1.2</u>

# Tenderer's JV Information Form (to be completed for each member of Tenderer's JV) Date: \_\_\_\_\_

ITT No. and title:
Tenderer's JV name:
JV member's name:
JV member's country of registration:
JV member's year of constitution:
JV member's legal address in country of constitution:
JV member's authorized representative information Name: Address:
Telephone/Fax numbers: E-mail address:
<ol> <li>Attached are copies of original documents of</li> <li>☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 3.6.</li> <li>☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 3.8.</li> </ol>
2. Included are the organizational chart and a list of Board of Directors.

### 4.3 <u>FORM CON – 2</u>

# **Historical Contract Non-Performance, Pending Litigation and Litigation History**

Date: JV Memb	er's Nameand title:		
		accordance with Section III, Evaluation and Qualification C	
	-	nance did not occur since 1 <sup>st</sup> January [insert year] specified in Criteria, Sub-Factor 2.1.	n Section III,
	Contract(s) not perfo tion Criteria, require	ormed since 1 <sup>st</sup> January [insert year] specified in Section III, 2 ement 2.1	Evaluation and
Year	Non- performed portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and Kenya Shilling equivalent)
[insert year]	[insert amount and percentage]	Contract Identification: [indicate complete contract name/number, and any other identification] Name of Procuring Entity: [insert full name] Address of Procuring Entity: [insert street/city/country] Reason(s) for nonperformance: [indicate main reason(s)]	[insert amount]
Pending L	itigation, in accorda	nce with Section III, Evaluation and Qualification Criteria	
Factor 2.3 □ F	3.	in accordance with Section III, Evaluation and Qualification accordance with Section III, Evaluation and Qualification Crit	

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

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

### 4.4 **FORM FIN – 3.1:**

$\mathbf{F}$	inancial	Situation	and Per	formance
--------------	----------	-----------	---------	----------

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

### **4.4.1.** Financial Data

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

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

<sup>\*</sup>Refer to ITT 15 for the exchange rate

#### 4.4.2 **Sources of Finance**

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

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

#### 4.4.3 Financial documents

The Ter	derer and its parties shall provide copies of financial statements for	_years pursuant Section III, Evaluation
and Qua	lifications Criteria, Sub-factor 3.1. The financial statements shall:	
(a)	reflect the financial situation of the Tenderer or in case of JV member,	, and not an affiliated entity (such

- as parent company or group member).
- be independently audited or certified in accordance with local legislation. be complete, including all notes to the financial statements. (b)
- (c)
- correspond to accounting periods already completed and audited. (d)
- Attached are copies of financial statements<sup>1</sup> for the \_\_\_\_\_\_\_years required above; and complying with the requirements

### 4.5 **FORM FIN – 3.2:**

### **Average Annual Construction Turnover**

Tenderer's Name:	<del></del>
Date:	
JV Member's Name	
ITT No. and title:	

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

<sup>\*</sup> See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

### 4.6 **FORM FIN – 3.3**:

#### **Financial Resources**

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

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

### 4.7 **FORM FIN – 3.4**:

### **Current Contract Commitments / Works in Progress**

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

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

# 4.8 **FORM EXP - 4.1**

# **General Construction Experience**

Address:

Tenderer's	Name:		
JV Membe	er's Name	<del></del>	
ITT No. ar	nd title:		
Page		_ofpages	
Starting	Ending	Contract Identification	Role of
	Year		Tenderer
Year			
		Contract name	
		Contract name: Brief Description of the Works performed by the	
		Tenderer:Amount of contract:	
		Name of Procuring Entity:	
		Address: Contract name:	
		Brief Description of the Works performed by the	
		Tenderer:	
		Amount of contract:	
		Name of Procuring Entity:	
		Address:	
		Contract name:	
		Brief Description of the Works performed by the	
		Tenderer:	
		Amount of contract:	
		Name of Procuring Entity:	
	1		1

### 4.9 **FORM EXP - 4.2(a)**

### **Specific Construction and Contract Management Experience**

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

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

### **Specific Construction and Contract Management Experience (cont.)**

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

# 4.11 <u>FORM EXP - 4.2(b)</u>

# **Construction Experience in Key Activities**

Tenderer's Name:					
Date:					
Tenderer's JV Member Name:					
Sub-contractor's Name <sup>2</sup> (as per ITT 34):		_			
ITT No. and title:	_				
All Sub-contractors for key activities mu Evaluation and Qualification Criteria, S		e inf	ormation ir	n this form as	per ITT 34 and
1. Key Activity No One: _					
	Information				
Contract Identification					
Award date					
Completion date					
Role in Contract	Prime Contractor	Men JV □	nber in	Management Contractor □	Sub-contractor
Total Contract Amount				Kenya Shillin	g
Quantity (Volume, number or rate of	Total quantity	in	Percentage		Actual
production, as applicable) performed under	the contract		participation	on	Quantity
the contract per year or part of the year	(i)		(ii)		Performed
					(i) x (ii)
Year 1					
Year 2					
Year 3					
Year 4					
Procuring Entity's Name:					
Address:					
Telephone/fax number					
E-mail:					

Information

2. Activity No. Two 3. .....

#### OTHER FORMS

#### 5. FORM OF TENDER

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

#### **INSTRUCTIONS TO TENDERERS**

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

ine bl		TORMS OF THE TENDER	en as usica unaci (	s, below.	
Date of th	nis Tender submissio	n:[insert date (as d	ay, month and yea	r) of Tender submiss	ion] Tender
Name	and	Identification:	[insert	identification]	Alternative
No.:		[insert identification No	if this is a Tender	r for an alternative]	
To:	[Insert	t complete name of Procuring	g Entity]		
	Dear Sirs,				
1.	execution of the above remedy any defects the	ne Conditions of Contract, Spenamed Works, we, the under herein for the sum of Kenya	ersigned offer to con Shillings [/Amount	struct and complete th tin figures!	
	The above amount inc	cludes foreign currency amou	ınt (s) of [state figur	e or a percentage and	currency]
	The percentage or amount than two foreign curre	ount quoted above does not in encies.	nclude provisional su	ıms, and only allows n	ot more
2.	receipt of the Project I	ender is accepted, to commen Manager's notice to commenc e time stated in the Special Cor	e, and to complete th	ne whole of the Works	
3.		this tender until_cepted at any time before that		late], and it shall ren	nain binding
4.	acceptance thereof, sh	ormal Agreement is prepared hall constitute a binding Conti west or any tender you may re	ract between us. We		
5.	Addenda issued ii) <u>Eligibility:</u> We r	further declare that:  2: We have examined and had in accordance with ITT 28;  3: meet the eligibility requirement	ents and have no con		

<u>Tender-Securing Declaration</u>: We have not been suspended nor declared ineligible by the Procuring Entity based on execution of a Tender-Securing or Proposal-Securing Declaration in the Procuring

<u>Conformity</u>: We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works:

Entity's Country in accordance with ITT 19.8;

[insert a brief description of the Works];

- v) <u>Tender Price:</u> The total price of our Tender, excluding any discounts offered in item 1 above is: [Insert one of the options below as appropriate]
- vi Option 1, in case of one lot: Total price is: [insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies]; Or

#### Option 2, in case of multiple lots:

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

Name of Recipient	Address	Reason	Amount

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

- xvi) <u>Binding Contract</u>: We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- xvii) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive;
- xviii) <u>Fraud and Corruption:</u> We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;

- xix) <u>Collusive practices</u>: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.
- we undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copy available from \_\_\_\_\_(specify website) during the procurement process and the execution of any resulting contract.
- xxi) **Beneficial Ownership Information:** We commit to provide to the procuring entity the Beneficial Ownership Information in conformity with the Beneficial Ownership Disclosure Form upon receipt of notification of intention to enter into a contract in the event we are the successful tenderer in this subject procurement proceeding.
- xxii) We, the Tenderer, have duly completed, signed and stamped the following Forms as part of our Tender:
  - a) Tenderer's Eligibility; Confidential Business Questionnaire to establish we are not in any conflict to interest.
  - b) Certificate of Independent Tender Determination to declare that we completed the tender without colluding with other tenderers.
  - c) Self-Declaration of the Tenderer to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
  - d) Declaration and commitment to the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal

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

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

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

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

**Signature of the person named above**: [insert signature of person whose name and capacity are

shown above] **Date signed** [insert date of signing] day of [insert month], [insert year]

Date signed	day of	.,
-------------	--------	----

#### Notes

<sup>\*</sup> In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer

<sup>\*\*</sup> Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender.

### A. <u>TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE</u>

### **Instruction to Tenderer**

Tender is instructed to complete the particulars required in this Form, *one form for each entity if Tender is a JV*. Tenderer is further reminded that it is an offence to give false information on this Form.

### (a) Tenderer's details

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

### **General and Specific Details**

		ппи орее	ine Details	•				
<b>b</b> )	Sol	e Proprie	<b>tor,</b> provid	e the following det	ails.			
N:	ame in	full			А ое			Nationali
110	unic in	1411			rr <sub>ge</sub> Countr	v of Origin		_ Citizensh
						, or origin <u> </u>		
c)	Pa	rtnership	, provide th	ne following details	i.			
Nan	nes of l	Partners		Nationality	Citi	zenship	% Shares owned	
d)	Re	gistered (	Company,	provide the followi	ng detail	S.		
	i)	Private	or public C	ompany				
	ii)	State the	e nominal a	and issued capital o	f the Con	npany		
		Nomina	l Kenya Sh	illings (Equivalent	)			Issue
		Kenya S	Shillings (E	quivalent)				
	iii)	Give de	tails of Dir	ectors as follows.				
Nan	nes of l	Director		Nationality	Citi	zenship	% Shares owned	
						-		
) <b>D</b> i	ISCI O	STIDE ()	FINTEDE	ST- Interest of the	Firm in t	ha Dragurina	· Entity	
) <b>D</b> ]	ISCLO	SUKEOI		51-Interest of the	r 11 111 111 t	ne i rocurinș	g Enuty.	
i)							ocuring Entity) who has/	have an inter
	orı	elationshi	p in this fir	m? Yes/No				
If	yes, pro	ovide deta	ils as follo	ws.				
Nan	nes of P	erson	Designati	on in the Procuring	Entity	Interest or	Relationship with Tende	rer

### ii) Conflict of interest disclosure

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or		
	is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect		
	subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Tender has a relationship with another tenderer, directly or		
	through common third parties that puts it in a position to		
	influence the tender of another tenderer, or influence the		
	decisions of the Procuring Entity regarding this tendering		
	process.		

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

### f) Certification

submission.	ion given above is complete, current and accurate as at the date	; OI
Full Name	Titl	le or
Designation		
(Signature)	(Date)	

### B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

	ne undersigned, in submitting the accompanying Letter of Tender to the curing Entity] for:					
mak	ke the following statements that I certify to be true and complete in every re	spect:				
Icer	rtify, on behalf of	[Name of Tenderer] that:				
1.	I have read and I understand the contents of this Certificate;					
2.	I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;					
3.	I am the authorized representative of the Tenderer with authority to sign on behalf of the Tenderer;	n this Certificate, and to submit the Tender				
4.	For the purposes of this Certificate and the Tender, I understand that to individual or organization, other than the Tenderer, whether or not affiliated has been requested to submit a Tender in response to this request for could potentially submit a tender in response to this request for abilities or experience;	ated with the Tenderer, who: For tenders;				
5.	<ul> <li>The Tenderer discloses that [check one of the following, as applicable:</li> <li>a) The Tenderer has arrived at the Tender independently from, and agreement or arrangement with, any competitor;</li> <li>b) the Tenderer has entered into consultations, communications, more competitors regarding this request for tenders, and document(s), complete details thereof, including the names or reasons for, such consultations, communications, agreements or any communications.</li> </ul>	agreements or arrangements with one or the Tenderer discloses, in the attached of the competitors and the nature of, and				
6.	In particular, without limiting the generality of paragraphs (5)(a) or (5) communication, agreement or arrangement with any competitor regard a) prices; b) methods, factors or formulas used to calculate prices; c) the intention or decision to submit, or not to submit, a tender; or d) the submission of a tender which does not meet the specification specifically disclosed pursuant to paragraph (5)(b) above;	ing:				
7.	In addition, there has been no consultation, communication, agreent regarding the quality, quantity, specifications or delivery particulars of for tenders relates, except as specifically authorized by the procur pursuant to paragraph (5)(b) above;	the works or services to which this request				
8.	the terms of the Tender have not been, and will not be, knowingly disclosed any competitor, prior to the date and time of the official tender open whichever comes first, unless otherwise required by law or as specific above.	ening, or of the awarding of the Contract				
	Name	TitleDate				
	[Name, title and signature of authorized agent of Tenderer and Date					

### C. <u>SELF - DECLARATION FORMS</u>

### FORM SD1

SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENTAND ASSET DISPOSALACT 2015.

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

### FORM SD2

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

I,		of P. O. Box in the Republic of	being a resident of do hereby make a statement as follows: -
1.	name of the Company)	who is a Bidder in respect of Tender	Officer/Director of
2.	practice and has not bee	n requested to pay any inducement to a	ractors will not engage in any corrupt or fraudulent ny member of the Board, Management, Staff and/or ne of the Procuring entity) which is the procuring
3.			ontractors have not offered any inducement to any and/or agents of (name of the
4.	THAT the aforesaid Bidder will not engage /has not engaged in any corrosive practice with other bidde participating in the subject tender		
5.	THAT what is deponed	to herein above is true to the best of my k	cnowledge information and belief.
	(Title)	(Signature)	(Date)
	Bidder's Official Stamp	)	

### DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

Company/Firm)	declare that I have read and fully understood the , 2015, Regulations and the Code of Ethics for persons
I do hereby commit to abide by the provisions of the Code of E Asset Disposal.	thics for persons participating in Public Procurement and
Name of Authorized signatory	Sign
Position	
Office address	Telephone
E-mail	
Name of the Firm/Company	
Date	(Company Seal/ Rubber
Stamp where applicable)	
Witness	
Name	Sign
Date	

#### D. APPENDIX 1-FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

#### 1. Purpose

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

#### 3. Requirements

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

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

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

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

- a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:
  - i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
  - ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

- iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v) "obstructive practice" is:
  - deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
  - acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.
- b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:
  - "fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of the procuring entity or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive the procuring entity of the benefits of free and open competition.
- c) Rejects a proposal for award<sup>1</sup> of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority (ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations;
- e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub-consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect<sup>2</sup> all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and
- f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a "Self-Declaration Form" as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

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

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

# FORM OF TENDER SECURITY-[Option 1–Demand Bank Guarantee] Beneficiary: **Request for Tenders No:** Date: TENDER GUARANTEE No.: Guarantor: We have been informed that \_\_\_\_\_\_ (here inafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (here inafter called the Tender) for the execution of under Request for Tenders No.\_\_\_\_\_("the ITT"). Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee. At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of \_\_\_\_\_(\_\_\_\_) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant: (a) has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Applicant; or having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above

onor before that date.

[signature(s)]

### FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

	[Witness]	[Seal]	
	[Date ]	[Signature of the Guarantor]	
	equently, any demand for payme e on or before that date.	ent under this guarantee must be received by us	at the office indicated
This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii)twenty-eight days after the end of the Tender Validity Period.			
receij its de occur	pt of the Procuring Entity's first emand, provided that in its dem rrence of any of the above ever	mediately pay to the Procuring Entity up to the written demand, without the Procuring Entity and the Procuring Entity shall state that the dents, specifying which event(s) has occurred.	having to substantiate emand arises from the
b)	Validity Period or any extension agreement; or (ii) has failed to	cceptance of its Tender by the Procuring Ent on thereto provided by the Principal; (i) failed to furnish the Performance Security, in accordance ocuring Entity's Tendering document.	execute the Contract
a)		ng the period of Tender validity set forth in the Period"), or any extension thereto provided by	
NOW	V, THEREFORE, THE CONDIT	TON OF THIS OBLIGATION is such that if t	he Applicant:
Seale	ed with the Common Seal of the sa	aid Guarantor thisday of 20	
havin [Nam (Curr	ng our registered office at	s that WE of [Name of (hereinafter called "the Guarantor"), are bor called "the Procuring Entity") in the sun which payment well and truly to be made to the said assigns, jointly and severally, firmly by these presents.	und unto
		ofunder Request for Tenders No	
	[Date of submission of tender]	for the [Name and/or description of	the tender] (hereinafter

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

### TENDER-SECURING DECLARATION FORM

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

# **Appendix to Tender**

### **Schedule of Currency requirements**

Summary of currencies of the Tender for		[insert name	of Section	of the	Works]
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Name of currency	Amounts payable
Local currency:	
Foreign currency #1:	
Foreign currency #2:	
Foreign currency #3:	
Provisional sums expressed in local currency	[To be entered by the Procuring Entity]



### **SECTION V - DRAWINGS**

A list of drawings should be inserted here. The actual drawings including Site plans should be annexed in a separate booklet.

LAISAMIS INTEGRATED WATER PROJECT TECHNICAL DR		
Drawing No	Drawing Name	SHEET NO
1	Namarei Water Pan Plan	1 of 1
2	Namarei Water pan Sections	1 of 1
3	Namarei Silt trap	1 OF 1
4	Namarei Gabion Plan	1 OF 1
5	Namarei Shallow well	1 OF 1
6	Spill way drawing	1 OF 1
7	Olturot Rising main Profile	1 OF 1
8	Olturot Project: Borehole to Elevated Steel tank Pipeline Profile	1 OF 1
10	Olturot Project: Steel tank to Water Kiosk pipeline Profile	1 OF 1
11	100m³ Elevated steel tank	1 OF 1
12	100m³ Elevated steel tank Foundation details	1 OF 1
13	100m³ Elevated steel tank tower	1 OF 1
14	Olturot Livestock trough	1 OF 1
15	Ngororoi Intake	1 OF 1
16	16 Ngororoi Intake to Old Intake Pipeline Profile	1 OF 1
17	Ngororoi Pipeline Support Details	1 OF 1
18	Ljata Pipeline Profile	1 OF 2
19	Ljata Pipeline Profile	2 OF 2
20	Ljata Pipeline Profile	3 OF 3
21	Standard Drawings	5 OF 5
22	Water Kiosk	14 OF 14
23	Olturot Layouts 1 OF 2	1 OF 2
24	Ngororoi Layout	2 OF 2
25	Standard Sign Board model	1 OF 1

26	3-Door Boys' latrine	1 of 1
27	3-Door Girls' Latrine	1 of 1

#### **SECTION VI - SPECIFICATIONS**

Notes for preparing Specifications

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

### TECHNICAL SPECIFICATIONS FOR WORKS/SERICES

A preliminary description of the proposed works/services and work method and schedule, including drawings and charts, as necessary, containing all required information by which the proposed works may be evaluated (e.g. technical characteristics, operational capacities, maintenance, environmental effect, etc.) together with manuals or instructions for use or any other relevant information and documentation, delivery/installation schedules, etc.;

A detailed statement of how the tenderer will carry out the works/services that will form an integral part of the Contract.

#### **GENERAL**

All materials, equipment and testing apparatus etc. to be executed by the Contractor in this Contract shall conform to the requirements of the latest Kenya Standards, International Standards Organization (ISO) Standards, DIN, British Standards or other approved applicable Standard in Kenya, unless otherwise specifically stated.

All dimensions and measurement units shall be in S.I. units.

#### **CLEARING SITE**

The Contractor shall demolish, break up, remove buildings, walls, gates, fences, advertisements and other structures and obstructions, grub up, remove trees, hedges, bushes and shrubs, and clear the site of the works at such time and to the extent required by the Engineer. Otherwise, subject to the provisions of Clause 27 of the Conditions of Contract: the materials so obtained shall so far as suitable be reserved and stacked for further use; all rubbish and materials for use shall be destroyed or removed from the site, as directed by the Engineer. Where top soil has to be excavated this shall be removed and stacked on site. After completion of construction, it shall be spread over the disturbed ground, any surplus being disposed of as directed by the Engineer. Underground structures and chambers where required to be demolished, shall be demolished to depths shown on drawings or as directed. They shall be properly cleaned out and backfilled and compacted with suitable material to the direction and approval of the Engineer.

#### **VEGETATION**

No allowance will be made for the cutting and removal of crops, grass, weeds and similar vegetation. The cost of all such work will be held to be included in the rates entered in the Bill of Quantities.

#### **BUSHES AND SMALL TREES**

All bushes and small trees, the main stem of which is less than 500mm girth at 1 metre above ground level shall be uprooted (unless otherwise directed by the Engineer) and burnt or otherwise disposed of as directed by the Engineer.

#### **HEDGES**

Where directed by the Engineer, hedges shall be uprooted and disposed of by burning.

#### **FELLING TREES**

Where shown on the drawings or directed by the Engineer, trees shall be uprooted or cut down as near to ground level as is possible. The rates entered in the Bill of Quantities shall include for cutting down,

removing branches and foliage, cutting useful timber into suitable lengths, loading, transporting not more than 1 km. and stacking or disposing off all as directed by the Engineer. For the purpose of measurement trees cut down shall be classified according to their girth at 1 metre above ground level, the cost of grubbing up roots shall be deemed to be covered by the rate for felling trees.

#### **GRUBBING-UP ROOTS**

Stumps and tree roots shall, unless otherwise directed, be grubbed up, blasted, burnt or removed and disposed of in approved dumps to be provided by the Contractor. Where directed by the Engineer, the holes resulting from grubbing up shall be filled with approved materials, which shall be deposited and compacted in layers not exceeding 225mm loose depth, to the same dry density as that of the adjoining soil. For the purpose of measurement, tree roots shall be classified according to the mean diameter of the stump measured across the cut.

#### **EXCAVATION**

#### DEFINITION AND CLASSIFICATION OF EXCAVATED MATERIALS

Excavation in the Bills of Quantities shall be classified in two categories: -

#### **Common Excavation**

Any material, which in the opinion of the Engineer can be excavated by use of pick axes and hand levers, shall be classified as common excavation. Water logged material shall be included in this class. Murram in any form shall be classified as common excavation.

#### Rock

The decision of the Engineer in classifying rock shall be final and binding. Rock in the Bill of Quantities will be itemized in three classes:-

#### Class 'A'

Soft rock of the type known locally as 'tuff' which in the opinion of the Engineer cannot be considered as hard rock but which considerably increases the amount of labour needed for its removal shall be known as Class 'A' rock.

#### Class 'B'

Very weathered phonolite lava containing many fissures and faults shall be known as hard rock. This type of rock contains stones and boulders of unweathered or incompletely formed black-trap or lava. A boulder or outcrop of hard rock 1.5 cubic meters or less and grey or green building stone in a formation which is massive and geologically homogeneous, will be deemed Class' B' rock.

#### Class 'C'

Phonolite in a formation that is massive and geologically homogeneous shall be known as Class 'C' rock.

#### **EXCAVATION FOR FILL**

Where excavation reveals a combination of suitable and unsuitable materials, the Contractor shall, wherever the Engineer considers it practicable, carry out the excavation in such a manner that the suitable materials are placed separately for use in the works without contamination by the unsuitable materials.

If any suitable material excavated from within the site is, with the agreement of the Engineer, taken by the Contractor for his use, sufficient suitable filling material to occupy after specified compaction, a volume corresponding to that which the excavated material occupied, shall, unless otherwise directed by the Engineer be provided by the Contractor from his own sources.

No excavated material shall be dumped or run to spoil except on the direction or with the permission of

the Engineer who may require material, which is unsuitable to be retained on site. Material used for haul roads shall not be re-used without the permission of the Engineer.

## COMPACTION OF FILL

All materials used in fill shall be compacted to specification by plant approved by the Engineer for that purpose. Maximum compacted thickness of such layers shall not be more than 200mm.

Work on the compaction of plastic materials for fill shall proceed as soon as practicable after excavation and shall be carried out only when the moisture content is not greater than 2 per cent above the plastic limit for that material. Where the moisture content of plastic material as excavated is higher than this value, the material shall be run to spoil and an equal volume of material suitable for filling shall be replaced, unless the Contractor prefers, at his own expense, to wait until the material has dried sufficiently for acceptance again as suitable material. Nevertheless, if the Engineer doubts any materials' compaction being obtained within the above moisture limits he may require compaction to proceed only when the limits of moisture content for the compaction of non-plastic materials are within the range of the optimum moisture content and 3 per cent below the optimum moisture content as determined by the laboratory compaction test method described in British Standard 1377: Methods of Test for Soil Classification and Compaction.

If any such non-plastic material on excavation is too wet for satisfactory compaction and the Engineer orders the moisture content to be lowered or raised, such work shall be treated as included in the rates. All adjustments of moisture content shall be carried out in such a way that the specified moisture content remains uniform throughout compaction.

Work shall be continued until a state of compaction is reached throughout the fill, which shall have relative compaction determined according to B.S. 1377 not less than 85% of maximum dry density at optimum moisture contents. For excavation under Roads, House Drives and Car Parks the backfilling shall be compacted in 150mm layer to 100% maximum dry density.

If with non-plastic materials the compacted material has become drier in the interval between the completion of compaction and the measurement of the state of compaction, then the moisture content to be used for the calculation of the air content shall be the mean moisture content for the compaction of such materials as specified above.

# TRENCHES OF GREATER WIDTH AND DEPTH THAN NECESSARY

The Contractor shall not be entitled to payment in respect of excavation largely, whether horizontally or vertically, than is necessary to receive any structure for which the excavation is intended, except where a separate item is provided for additional excavation for working space, timbering, or other temporary work. Excavation to a greater depth or width than directed shall be made good with suitable materials to the satisfaction of the Engineer and at the Contractor's cost.

# **SUPPORTS FOR TRENCHES**

The sides of trenches shall where necessary be adequately supported to the satisfaction of the Engineer by timber or other approved means.

## PROVISION OF SPOIL HEAPS

The Contractor shall provide spoil heaps at his own expense for the disposal of surplus material and all rubbish collected when clearing the site and during the construction of the works. The Engineer shall approve the sites for these.

## WATER IN EXCAVATIONS

All excavations shall be kept free from water, from whatever source, at all times during construction of works until in the opinion of the Engineer, any concrete or other works therein are sufficiently set. The Contractor's rates are deemed to cover compliance with this requirement. The Contractor shall construct any sumps or temporary drains that the Engineer may deem necessary and shall be responsible for the removal and disposal of all water entering the excavations from whatever source and shall deal with and dispose of such water in a manner approved by the Engineer to ensure that excavations are kept dry.

## **CONCRETE**

## **SCOPE OF SECTION**

This section covers the materials, design of mixes, mixing, transport, placing, compaction and curing of concrete and mortar required in the Works. It also covers formwork and reinforcement for concrete.

## **DEFINITIONS**

Structural concrete is any class of concrete used in reinforced, pre-stressed or unreinforced concrete construction, which is subject to stress.

Non-structural concrete is composed of materials complying with the Specification but for which no strength requirements are specified and which is used only for filling voids, blinding foundations and similar purposes where it is not subjected to significant stress.

A formed surface is a face, which has been cast against formwork.

An unformed surface is a horizontal or nearly horizontal surface produced by screeding or troweling to the level and finish required.

A pour refers to the operation of placing concrete into any mould, bay or formwork, etc. and to the volume, which has to be filled. Pours in vertical succession are referred to as lifts.

# THE DESIGN OF CONCRETE MIXES

Cement

Cement for structural concrete shall be CEM I - 42.5 to KS EAS 18-1 and KS EAS 183

## Classes of Concrete

The classes of structural concrete to be used in the works shall be those shown on the Drawings and designated in Table 4.1, in which the class designation includes two figures. The first figure is the nominal strength at 28 days expressed in N/mm<sup>2</sup> and the second figure is the maximum nominal size of aggregate in the mix expressed in millimetres.

4.3.2 Design of Proposed Mixes

The Contractor shall design all the concrete mixes called for on the Drawings, making use of the ingredients which have been approved by the Engineer for use in the Works and in compliance with the following requirements:-

# <u>Table 4.1 - CONCRETE CLASSES AND STRENGTHS</u>

Class of	Nominal	Maximum	Maximum Water	Trial Mixes	Early W	orks	Test	Cubes
Concrete	Strength	Nominal Size	/ Cement Ratio	Target Mean	(Clause 4	01 d)		

N/mm <sup>2</sup> of Agg		e		Strength	Any or	one Average of any		
	mm			_	-	Group of 4 Cubes		
		A	В	N/mm <sup>2</sup>	N/mm <sup>2</sup>	N/mm <sup>2</sup>		
10	75	0.60	0.55	13.5	8.5	13.3		
15	75	0.60	0.50	21.5	12.8	20.0		
15	40	0.60	0.50	21.5	12.8	20.0		
15	20	0.57	0.50	21.5	12.8	20.0		
20	40	0.55	0.48	31.5	17.0	27.5		
20	20	0.53	0.48	31.5	17.0	27.5		
20	10	0.50	0.48	31.5	17.0	27.5		
25	40	0.52	0.46	36.5	21.3	32.5		
25	20	0.50	0.46	36.5	21.3	32.5		
25	10	0.48	0.46	36.5	21.3	32.5		
30	40	0.50	0.45	41.5	25.5	37.5		
30	20	0.48	0.45	41.5	25.5	37.5		
30	10	0.47	0.45	41.5	25.5	37.5		
40	20	0.46	0.43	51.5	34.0	47.5		
40	10	0.45	0.43	51.5	34.0	47.5		
	10 15 15 15 20 20 20 25 25 25 30 30 30	10 75 15 75 15 40 15 20 20 40 20 20 20 10 25 40 25 20 25 10 30 40 30 20 30 10	mm A  10 75 0.60  15 75 0.60  15 40 0.60  15 20 0.57  20 40 0.55  20 20 0.53  20 10 0.50  25 40 0.52  25 20 0.50  25 10 0.48  30 40 0.50  30 20 0.48  30 10 0.47  40 20 0.46	mm       A       B         10       75       0.60       0.55         15       75       0.60       0.50         15       40       0.60       0.50         15       20       0.57       0.50         20       40       0.55       0.48         20       20       0.53       0.48         20       10       0.50       0.48         25       40       0.52       0.46         25       20       0.50       0.46         25       10       0.48       0.46         30       40       0.50       0.45         30       20       0.48       0.45         30       10       0.47       0.45         40       20       0.46       0.43	mm       A       B       N/mm²         10       75       0.60       0.55       13.5         15       75       0.60       0.50       21.5         15       40       0.60       0.50       21.5         15       20       0.57       0.50       21.5         20       40       0.55       0.48       31.5         20       20       0.53       0.48       31.5         20       10       0.50       0.48       31.5         25       40       0.52       0.46       36.5         25       20       0.50       0.46       36.5         25       10       0.48       0.46       36.5         30       40       0.50       0.45       41.5         30       20       0.48       0.45       41.5         30       10       0.47       0.45       41.5         40       20       0.46       0.43       51.5	mm         A         B         N/mm²         N/mm²           10         75         0.60         0.55         13.5         8.5           15         75         0.60         0.50         21.5         12.8           15         40         0.60         0.50         21.5         12.8           15         20         0.57         0.50         21.5         12.8           20         40         0.55         0.48         31.5         17.0           20         20         0.53         0.48         31.5         17.0           20         10         0.50         0.48         31.5         17.0           25         40         0.52         0.46         36.5         21.3           25         20         0.50         0.46         36.5         21.3           25         10         0.48         0.46         36.5         21.3           30         40         0.50         0.45         41.5         25.5           30         20         0.48         0.45         41.5         25.5           30         10         0.47         0.45         41.5         25.5		

# **NOTES**:

Under water/cement ratio, column A applies to moderate and intermediate exposure, and column B applies to severe exposure. See NOTE after Table 4.2.

In case of concrete having a maximum aggregate size of 40mm or less, 150mm cubes should be used. In case of concrete having a 75mm or larger aggregate, 200mm cubes should be used.

The aggregate portion shall be well graded from the nominal maximum size of stone down to the 150-micron size.

The cement content shall be such as to achieve the strengths called for in Table 4.1 but in any case not less than the minimum necessary for impermeability and durability shown in Table 4.2.

The workability shall be consistent with ease of placing and proper compaction having regard to the presence of reinforcement and other obstructions.

The water/cement ratio shall be the minimum consistent with adequate workability but in any case not

greater that that shown in Table 4.1 taking due account of any water contained in the aggregates. The Contractor shall take into account that this requirement may in certain cases require the inclusion of a workability agent in the mix.

The drying shrinkage determined in accordance with BS 1881 shall not be greater than 0.05 percent.

**Table 4.2 - Minimum Cement Content** 

Minimum Cement Content - k	g/m <sup>3</sup> of Compacted C	oncrete	
Class of Concrete	Moderate Exposure	Intermediate Exposure	Severe Exposure
10/75,15/75	200	220	270
15/40, 20/40, 25/40, 30/40	240	270	290
15/20, 20/20, 25/20, 30/20	260	300	330
40/20	300	320	330
20/10, 25/10, 30/10	300	340	390
40/10	310	340	390

Based on the results of the tests on the trial mixes, the Contractor shall submit full details of his proposals for mix design to the Engineer, including the type and source of each ingredient, the proposed proportions of each mix and the results of the tests on the trial mixes.

If the Engineer does not agree to a proposed concrete mix for any reason, the Contractor shall amend his proposals and carry out further trial mixes. No mix shall be used in the works without the written consent of the Engineer.

# QUALITY CONTROL OF CONCRETE PRODUCTION

## Sampling

For each class of concrete in production at each plant for use in the works, samples of concrete shall be taken at the point of mixing and/or of deposition as instructed by the Engineer, all in accordance with the sampling procedures described in BS 1881 and with the additional requirements as set out below.

Six number 150mm or 200mm cubes as appropriate shall be made from each sample, shall be cured, and tested all in accordance with BS 1881, two at seven days and the other four at 28 days.

Each sample shall be taken from one batch selected at random and at intervals such that each sample represents not more than  $20m^3$  of concrete unless the Engineer agrees to sampling at less frequent intervals.

Until compliance with the Specification has been established the frequency of sampling shall be three times that stated above or such lower frequency as may be instructed by the Engineer.

#### Testing

The slump or compacting factor of the concrete shall be determined for each batch from which samples are taken and in addition for other batches at the frequency instructed by the Engineer.

The slump of the concrete in any batch shall not differ from the value established by the trial mixes by more than 25mm or one third of the value, whichever is the greater.

The variation in value of the compacting factor, if used in place of a slump value, shall be within the following limits:

For value of 0.9 or more-+0.03

For value of between 0.8 and 0.9 - +0.04

For values of 0.8 or less - +0.05

The water/cement ratio as estimated from the results of (a) above, determined by samples from any batch shall not vary by more than five per cent from the value established during the trial mixes.

The air content of air-entrained concrete in any batch shall be within 1.5 units of the required value and the average value of four consecutive measurements shall be within 1.0 unit of the required value, expressed as a percentage of the volume of freshly mixed concrete.

Until such time as sufficient test results are available to apply the method of control described in (e) below, the compressive strength of the concrete at 28 days shall be such that no single result is less than the value shown in Table 4.1 under the heading early works test cubes' and also that the average value of any four consecutive results is not less than the value shown in Table 4.1 under the same heading.

The 7-day cube result may be used as an early strength indicator, at the discretion of the Engineer.

When test cube results are available for at least 20 consecutive batches of any class of concrete mixed in any one plant, the average of any four consecutive results at 28 days shall exceed the nominal strength by not less than half the current margin (Table 4.3) and each individual result shall not be less than 85 per cent of the nominal strength.

The current margin shall be defined as 1.64 times the standard deviation of cube tests on at least 20 separate consecutive batches produced from one plant over a period exceeding five days but not exceeding six months or on at least 50 separate consecutive batches produced from one plant over a period not exceeding 12 months. If both figures are available, the smaller shall be taken.

The current margin shall in any case not be less than the figure given below:-

Table 4.3 - MINIMUM CURRENT MARGIN FOR TEST CUBES

	Minimum Cui	Minimum Current Margin for						
	10N/mm <sup>2</sup>	15N/mm <sup>2</sup> & above	20N/mm <sup>2</sup>					
After 20 batches	3.3	5	7.5					
After 50 batches	1.7	2.5	3.8					

# Failure to comply with requirements:

If any one test cube result in a group of four consecutive results is less than 85% of the nominal strength but the average of the group of which it is part satisfies the strength requirement, then only the batch from which the failed cube was taken shall be deemed not to comply with the Specification.

If more than one cube result in a group of four consecutive results is less than 85% of the nominal strength or if the average strength of the group fails to satisfy the strength requirement then all the batches between those represented by the first and last cubes in the group shall be deemed not to comply with the Specification, and the Specification, and the Contractor shall immediately adjust the mix design subject to the agreement of the Engineer to restore compliance with the Specification. After adjustment of the mix design, the Contractor will again be required to comply with sub-clauses 401(b) and 401(c) of this Section of the Specification.

The Contractor shall take necessary action to remedy concrete, which does not comply with this Specification. Such action may include but is not necessarily confined to the following:-

Increasing the frequency of sampling until control is again established.

Cutting test cores from the concrete and testing in accordance with SRN 117.

Carrying out strengthening or other remedial work to the concrete where possible or appropriate.

Carrying out non-destructive testing such as load tests on beams.

Removing the concrete.

## 4.5 HAND-MIXED CONCRETE

Concrete for structural purposes shall not be mixed by hand. Where non-structural concrete is required, hand mixing may be carried out subject to the agreement of the Engineer.

The mixing shall be done on a hard impermeable surface. The materials shall be turned over not less than three times dry, water shall then be sprayed on and the materials again turned over not less than three times in a wet condition and worked together until a mixture of uniform consistency is obtained. For hand mixed concrete the specified quantities of cement shall be increased by 10% and not more than 0.5 cubic meter shall be mixed at one time. During windy weather efficient precautions shall be taken to prevent cement from being blown away during the process of gauging and mixing.

## TRANSPORT OF CONCRETE

The concrete shall be discharged from the mixer and transported to the Works by means which shall prevent adulteration, segregation or loss of ingredients, and which shall ensure that the concrete is of the required workability at the point and time of placing. The loss of slump between discharge from the mixer and placing shall not exceed 25mm. The mixed concrete shall be transported using agitator trucks or transit truck mixers. The agitating speed of the drum shall be between 2 and 4 rpm. The interval between feeding of water into the mixer drum and final discharging of the concrete shall not exceed one hour.

The time elapsed between mixing and placing a batch of concrete shall be as short as practicable as and in any case not longer than will permit completion of placing and compaction before the onset of initial set. If the placing of any batch of concrete is delayed beyond this period, the concrete shall not be placed in the Works.

## PLACING OF CONCRETE

# Consent for Placing

Concrete shall not be placed in any part of the Works until the Engineer's consent has been given in writing, and the Contractor shall give the Engineer at least 1 full working days' notice of his intention to place concrete.

If concrete placing is not commenced within 24 hours of the Engineer's consent the Contractor shall again request consent as specified above.

# Preparation of Surface to Receive Concrete

Excavated surfaces on which concrete is to be deposited shall be prepared as set out in Section 3 of this Specification.

Existing concrete surfaces shall be prepared as set out in Clause 414. Before deposition of further concrete they shall be clean, hard and sound and shall be wet but without any free-standing water.

Any flow of water into an excavation shall be diverted through proper side drains to a sump, or be removed by other suitable methods which will prevent washing away the freshly deposited concrete or any of its constituents. Any underdrains constructed for this purpose shall be completely grouted up when they are no longer required by a method agreed by the Engineer.

Unless otherwise instructed by the Engineer surfaces against which concrete is to be placed shall receive a prior coating of mortar mixed in the proportions similar to those of the fines portion in the concrete to be placed. The mortar shall be kept ahead of the concrete. The mortar shall be well worked into all parts of the excavated surface and shall not be less than 5mm thick. If any fissures have been cleaned out as described in Section 3 of this Specification they shall be filled with mortar or with concrete as instructed by the Engineer. The amount of mortar placed at any one time shall be limited so that it does not dry out or set before being covered with concrete.

#### Chutes

In general, transportation of concrete by the use of chutes will not be permitted unless approved by the Engineer. The chute shall have a section with round corners and shall have a proper fixed slope so as to allow the concrete to flow satisfactorily and without segregation. The lower end of chute shall be provided with a drop chute not less than 0.6m in height to avoid segregation of falling concrete. The

height of drop shall not exceed 1.5m. Chutes shall be protected from direct sunlight, wind and rain.

## Placing Procedures

The concrete shall be deposited as nearly as possible in its final position. It shall be placed so as to avoid segregation of the concrete and displacement of the reinforcement, other embedded items, or formwork. It shall be brought up in layers approximately parallel to the construction joint planes and not exceeding 500mm in compacted thickness unless otherwise permitted or directed by the Engineer, but the layers shall not be thinner than four times the maximum nominal size of aggregate.

Layers shall be placed so that they do not form feather edges nor shall they be placed on a previous layer which has taken its initial set. In order to comply with this requirement, a layer may be started before completion of the preceding layer.

All the concrete in a single bay or pour shall be placed in a continuous operation. It shall be carefully worked round all obstructions, irregularities in the foundations and the like so that all parts are completely full of compacted concrete with no segregation or honeycombing. It shall also be carefully worked round and between waterstops, reinforcement, embedded steelwork and similar items which protrude above the surface of the completed pour.

All work shall be completed on each batch of concrete before its initial set commences and thereafter the concrete shall not be disturbed before it has set hard. No concrete that has partially hardened during transit shall be used in the Works and the transport of concrete from the mixer to the point of placing shall be such that this requirement can be complied with. Concrete shall not be placed during rain which is sufficiently heavy or prolonged as to wash mortar from coarse aggregate on the exposed faces of fresh concrete. Means shall be provided to remove any water accumulating on the surface of the placed concrete. Concrete shall not be deposited into such accumulation of water.

In drying weather, covers shall be provided for all fresh concrete surfaces which are not being worked on. Water shall not be added to concrete for any reason.

When concrete is discharged above its place of final deposition, segregation shall be prevented by the use of chutes, downpipes, trunking, baffles or other appropriate devices, as approved by the Engineer. Forms for walls, columns and other thin sections of significant height shall be provided with openings or other devices that will permit the concrete to be placed in a manner that will prevent segregation and accumulations of hardened concrete on the formwork or reinforcement above the level of the placed concrete.

When it is necessary to place concrete under water the Contractor shall submit to the Engineer his proposals for the method and equipment to be employed. The concrete shall be deposited either by bottom-discharging watertight containers or through funnel-shaped tremies which are kept continuously full with concrete up to level above the water and which shall have the discharging bottom fitted with a trapdoor and immersed in the concrete in order to reduce to a minimum the contact of the concrete with the water. Special care shall be taken to avoid segregation.

If the level of concrete in a tremie pipe is allowed to fall to such an extent that water enters the pipe, the latter shall be removed from the pour and filled with concrete before being again lowered into the placing position. During and after concreting under water, pumping or dewatering in the immediate vicinity shall be suspended if there is any danger that such work will disturb the freshly placed concrete.

# Interruptions to Placing

If concrete placing is interrupted for any reason and the duration of the interruption cannot be forecast or is likely to be prolonged, the Contractor shall immediately take the necessary action to form a construction joint so as to eliminate as far as possible feather edges and sloping top surfaces and shall thoroughly compact the concrete already placed in accordance with Clause 406. All work on the concrete shall be completed while it is still plastic and it shall not thereafter be disturbed until it is hard

enough to resist damage. Plant and materials to comply with this requirement shall be readily available at all times during concrete placing.

Before concreting is resumed after such an interruption the Contractor shall cut out and remove all damaged or uncompacted concrete, feather edges or any other undesirable features and shall leave a clean sound surface against which the fresh concrete may be placed.

If it becomes possible to resume concrete placing without contravening the Specification and the Engineer consents to a resumption, the new concrete shall be thoroughly worked in and compacted against the existing concrete so as to eliminate any cold joints.

# **Dimensions of Pours**

Unless otherwise agreed by the Engineer, pours shall not be more than two meters high and shall as far as possible have a uniform thickness over the plan area of the pour. Concrete shall be placed to the full planned height of all pours except in the circumstances described in sub-clause 405(d).

The Contractor shall plan the dimensions and sequence of pours in such a way that cracking of the concrete does not take place due to thermal or shrinkage stresses.

# **Placing Sequence**

The Contractor shall arrange that as far as possible the intervals between placing successive lifts of concrete in one section of the Works are of equal duration. This duration shall normally be not less than three or more than seven days under temperate weather conditions unless otherwise agreed by the Engineer.

Where required by the Engineer to limit the opening of construction joints due to shrinkage, concrete shall not be placed against adjacent concrete which is less than 21 days old.

When the drawings call for contraction gaps in concrete, these shall be of the widths and in the locations shown on the drawings and they shall not be filled until the full time interval shown on the drawings has elapsed.

## COMPACTION OF CONCRETE

The concrete shall be fully compacted throughout the full extent of the placed layer. It shall be thoroughly worked against the formwork and around any reinforcement and other embedded items, without displacing them. Particular care shall be taken at arises and other confined spaces. Successive layers of the same pour shall be thoroughly worked together.

Concrete shall be compacted with the assistance of mechanical immersion vibrators, unless the Engineer agrees to another method.

Immersion vibrators shall operate at a frequency of between 7,000 and 10,000 cycles per minute. The Contractor shall ensure that vibrators are operated at pressures and voltages not less than those recommended by the manufacturer in order that the compactive effort is not reduced.

A sufficient number of vibrators shall be operated to enable the entire quantity of concrete being placed to be vibrated for the necessary period and, in addition, standby vibrators shall be available for instant use at each place where concrete is being placed.

Where the concrete contains aggregate with a nominal size of 75mm or more, vibrators with a diameter of 100mm or more shall be used.

Vibration shall be continued at each point until the concrete ceases to contract, a thin layer of mortar has appeared on the surface and air bubbles have ceased to appear. Vibrators shall not be used to move concrete laterally and shall be withdrawn slowly to prevent the formation of voids.

Vibration shall not be applied by way of reinforcement nor shall vibrators be allowed to touch reinforcement or other embedded items. The vibrators shall be inserted vertically into the concrete to penetrate the layer underneath at regular spacing. The spacing shall not exceed the distance from the

vibrator over which vibration is visibly effective.

#### **CURING OF CONCRETE**

## General

Concrete shall be protected during the first stage of hardening from loss of moisture and from the development of temperature differentials within the concrete sufficient to cause cracking. The methods used for curing shall not cause damage of any kind to the concrete.

Curing shall be continued for as long as may be necessary to achieve the above objectives but in any case for at least seven days or until the concrete is covered by later construction whichever is the shorter period.

The above objectives are dealt with in sub-clause 407(b) and (c) but nothing shall prevent both objectives being achieved by a single method where circumstances permit.

The curing process shall commence as soon as the concrete is hard enough to resist damage from the process, and in the case of large areas or continuous pours, shall commence on the completed section of the pour before the rest of the pour is finished.

Details of the Contractor's proposals for curing concrete shall be submitted to the Engineer before the placing of concrete commences in the Works. Formed surfaces may be cured by retaining the formwork in place for the required curing period. If the use of the foregoing methods is inappropriate, surfaces which will not have further concrete bonded to them and which are not to receive an application of a finish may be cured by the application of a curing compound having an efficiency index of at least 90 percent. Curing compounds shall contain a fugitive dye to enable the extent of the spread to be seen easily.

Curing compound is used on surfaces exposed to the atmosphere shall contain sufficient finely divided flake aluminium in suspension to produce a complete coverage of the surface with a metallic finish when applied at the rate recommended by the manufacturer.

Curing compounds shall become stable and impervious to the evaporation of water from the concrete surface within 60 minutes of application. The material shall not react chemically with the concrete surfaces for at least the first four days of the curing period.

If instructed by the Engineer, the Contractor shall, in addition to the curing provisions set out above provide a suitable form of shading to prevent the direct rays of the sun reaching the concrete surfaces for at least the first four days of the curing period.

#### Loss of Moisture

Exposed concrete surfaces shall be closely covered with impermeable sheeting, properly secured to prevent its removal by wind and the development of air spaces beneath it. Joints in the sheeting shall be lapped by at least 300mm.

If for some reason it is not possible to use impermeable sheeting, the Contractor shall keep the exposed surfaces continuously wet by means of a water spray or by covering with a water absorbent material which is kept wet, unless this method conflicts with sub-clause 407(c).

Water used for curing shall be of the same quality as that used for concrete mixing as stated in Clause 724 g).

# **Limitation of Temperature Differential**

The Contractor shall limit the development of temperature differentials in concrete after placing by any means appropriate to the circumstances including the following:

- Limiting concrete temperatures at placing as set out in sub-clause 409(b);
- Use of low heat cement, subject to the agreement of the Engineer;
- Insulation of exposed concrete surface by insulating blankets. Such blankets shall have an insulation value at least equivalent to 50mm of dry mineral wool;
- Leaving formwork in place during the curing period. Steel forms shall be suitably insulated on the outside;
- Preventing rapid dissipation of heat from surfaces by shielding from wind;
- Avoiding the use of water sprays when such use would cause rapid cooling of the surface.

# PROTECTION OF FRESH CONCRETE

Freshly placed concrete shall be protected from rainfall and from water running over the surface until it is sufficiently hard to resist damage from these causes. No traffic shall be allowed on any concrete surface until such time as it is hard enough to resist damage by such traffic. Concrete placed in the Works shall not be subjected to any loading until it has attained at least its nominal strength as defined in Clause 401.

If the Contractor desires to impose loads on newly-placed concrete, he shall make at least three test cubes and cure them in the same conditions as the concrete they represent. These cubes shall be tested singly at suitable intervals in order to estimate the time at which the nominal strength is reached.

## CONCRETING IN HOT WEATHER

#### General

The Contractor shall prevent damage to concrete arising from exposure to extreme temperatures, and shall maintain in good working order all plant and equipment required for this purpose.

In the event that conditions become such that even with the use of the equipment the requirements cannot be met, concrete placing shall immediately cease until such time as the requirements can again be met.

# **Concrete Placing in Hot Weather**

During hot weather the Contractor shall take all measures necessary to ensure that the temperature of concrete at the time of placing in the Works does not exceed 30 degrees centigrade and that the concrete does not lose any moisture during transporting and placing.

Such measures may include but are not necessarily limited to the following:-

Shielding aggregates from direct sunshine.

Use of a mist water spray on aggregates

Sun shields on mixing plants and transporting equipment.

Cooling the mixing water. If ice is used for this purpose it should preferably be in flake form. Lump ice shall not be allowed to enter the tank supplying the mixer drum.

Covering skips closely with polythene sheet so that the latter is in contact with the concrete. Areas in which concrete is to be placed shall be shielded from direct sunshine and rock or concrete surfaces shall be thoroughly wetted to reduce absorption of water from the concrete placed on or against them.

After concrete in any part of an area has been placed, the selected curing process shall be commenced as soon as possible. If any interval occurs between completion of placing and start of curing, the concrete shall be closely covered during the interval with polythene sheet to prevent loss of moisture.

## **MORTAR**

This clause covers mortar for use ahead of concrete placing, and other uses not covered elsewhere in the Specification. Mortar shall be composed of fine aggregate complying with Clause 724 c) and ordinary Portland cement complying with SRN 103. The mix proportions shall be as stated on the drawings or elsewhere in this Specification or if not stated shall be one part of cement to two parts of fine aggregate by weight.

Small quantities of mortar may be hand mixed but for amounts over 0.5 cubic metre a mechanical mixer shall be used.

The water content of the mortar shall be as low as possible consistent with the use for which it is required but in any case the water/cement ratio shall not be more than 0.5. Mortar, which is specified, as 'dry pack' shall be mixed with sufficient water for the mix to become cohesive but not plastic when squeezed in the hand. Dry pack mortar shall be rammed into the cavity it is required to fill, using a hand rammer with sufficient force to ensure full compaction.

# CONCRETE FOR SECONDARY PURPOSES

Non-structural concrete (NS concrete) shall be used only for non-structural purposes where shown on the drawings.

NS concrete shall be composed of ordinary Portland cement complying with SRN 103 and aggregates complying with SRN 108-111 including all-in aggregate within the grading limits of SRN 109 and SRN 111.

The weight of cement mixed with 0.3 cubic metres of combined or all-in aggregate shall not be less than 50 kg. The mix shall be proportioned by weight or by volume. The maximum aggregate size shall be 40mm nominal

The concrete shall be mixed by machine or by hand to a uniform colour and consistency before placing. The quantity of water used shall not exceed that required to produce a concrete with sufficient workability to be placed and compacted where required. The concrete shall be compacted by hand or by mechanical vibration.

No Fines concrete (NF concrete) is intended for use where a porous concrete is required and shall only be used where shown on the drawings or instructed by the Engineer.

The mix shall consist of ordinary Portland cement complying with SRN 115. The aggregate size shall be 40mm to 10mm only. The weight of cement mixed with 0.3 cubic metre of aggregate shall not be less than 50 kg. The quantity of water shall not exceed that required to produce a smooth cement paste which will coat evenly the whole of the aggregate.

## RECORDS OF CONCRETE PLACING

Records, in a form agreed by the Engineer, shall be kept by the Contractor of the details of every pour of concrete placed in the Works. These records shall include class of concrete, location of pour, date of pour, ambient temperature and weather conditions during mixing and placing and concrete temperature at time of placing, moisture contents of aggregates, details of mixes, batch numbers, cement batch number, results of all tests undertaken, location of test cube sample points and details of any cores taken. The Contractor shall supply to the Engineer four copies of these records each week covering work carried out the preceding week. In addition he shall supply to the Engineer monthly histograms of all 28 day cube strengths together with accumulative and monthly standard deviations and any other information which the Engineer may require concerning the concrete placed in the works.

## REMEDIAL WORK TO DEFECTIVE SURFACES

If on stripping any formwork the concrete surface is found to be defective in any way, the Contractor shall make no attempt to remedy such defects prior to the Engineer's inspection and the receipt of any

instructions which the Engineer may give. Defective surfaces shall not be made good by plastering.

Areas of honey combing (of a mild nature) which the Engineer agrees may be repaired shall be cut back to sound concrete or to 75mm whichever is the greater distance. In the case of reinforced concrete the area shall be cut back to at least 25mm clear distance behind the reinforcement or to 75mm, whichever is the greater distance. The cavity shall have sides at right angles to the face of the concrete. After cleaning out with water and compressed air, a thin layer of cement grout shall be brushed on to the concrete surface in the cavity and it shall then be filled immediately with concrete of the same class as the main body but with aggregate larger than 20mm nominal size removed. A form shall be used against the cavity, provided with a lip to enable concrete to be placed. The form shall be filled to a point above the top edge of the cavity.

After seven days the lip of concrete shall be broken off and the surface ground smooth. Surface irregularities which are outside the limits of tolerance set out in Clause 410 shall be ground down in the manner and to the extent instructed by the Engineer. Severe honeycombing and defects other than those mentioned above shall be dealt with as instructed by the Engineer.

## BENDING REINFORCEMENT

Unless otherwise shown on the drawings, bending and cutting shall comply with SRN 129.

The Contractor shall satisfy himself as to the accuracy of any bar bending schedules supplied and shall be responsible for cutting, bending, and fixing the reinforcement in accordance with the drawings. Any discrepancies should be brought to the attention of the Engineer prior to ordering the reinforcement.

Bars shall be bent cold by the application of slow steady pressure. At temperatures below 5 degrees centigrade the rate of bending shall be reduced if necessary to prevent fracture of the steel. After bending, bars shall be securely tied together in bundles or groups and legibly labelled as set out in SRN 129. Reinforcement shall be thoroughly cleaned and all dirt, scale, loose rust, oil and other contaminants removed before it is placed in the Works.

## FIXING REINFORCEMENT

Reinforcement shall be securely fixed in position within a dimensional tolerance of 20mm in any direction. This will be parallel to a concrete face and within a tolerance of 5mm at right angles to a face, if the cover is not thereby decreased below the minimum shown on the drawings, or if not shown shall be not less than 25mm or the diameter of the bar, whichever is the greater. Cover on distribution steel shall not be less than 15mm or the diameter of the bar whichever is the greater.

Unless otherwise agreed by the Engineer, all intersecting bars shall either be tied together with 1.6mm diameter soft annealed iron wire and the ends of the wire turned into the body of the concrete, or shall be secured with a wire clip of a type agreed by the Engineer.

Spacer blocks shall be used for ensuring that the correct cover is maintained on the reinforcement. Blocks shall be as small as practicable and of a shape agreed by the Engineer. They shall be made of mortar mixed in the proportions of one part of cement to two parts of sand. Wires cast into the block for tying in to the reinforcement shall be 1.6mm diameter soft annealed iron.

Alternatively another type of spacer block may be used subject to the Engineer's agreement.

Reinforcement shall be rigidly fixed so that no movement can occur during concrete placing. Any fixings made to the formwork shall not be within the space to be occupied by the concrete currently being placed.

No splices (laps) shall be made in the reinforcement except where shown on the drawings or agreed by the Engineer. Splice lengths shall be as shown on the drawings.

Reinforcement shall not be welded except where required by the Contract or agreed by the Engineer. If welding is employed, the procedures shall be as set out in SRN 937 for gas welding or SRN 919 for

metal arc welding. Full strength butt welds shall only be used for steel complying with SRN 126, and if used on high yield deformed bars complying with SRN 126 the permissible stresses in the vicinity of the weld shall be reduced to those applicable to plain bars complying with that Specification.

Mechanical splices shall not be used unless the Engineer agrees otherwise.

The Contractor shall ensure that reinforcement left exposed in the Works shall not suffer distortion, displacement or other damage. When it is necessary to bend protruding reinforcement aside temporarily, the radius of the bend shall not be less than four times the bar diameter for mild steel bars or six times the bar diameter for high yield bars. Such bends shall be carefully straightened before concrete placing continues, without leaving residual links or damaging the concrete around them. In no circumstances will heating and bending of high yield bars be permitted.

Bars complying with SRN 127 or other high tensile bars shall not be bent after placing in the Works. Before concrete is placed in any section of the Works, which includes reinforcement, the reinforcement shall be completely clean and free from all contamination including concrete, which may have been deposited on it from previous operations.

The Engineer's approval for concrete placing is to be sought in writing for each pour, leaving adequate time to inspect and rectify any defects noted in the formwork, falsework, reinforcement, scaffolding, concreting arrangements, etc.

# FORMWORK FOR CONCRETE

#### **DEFINITIONS**

Formwork means the surface against which concrete is placed to form a face, together with all the immediate supports to retain it in position while concrete is placed.

Falsework means the structural elements supporting both the formwork and the concrete until the concrete becomes self-supporting.

A formed face is one which has been cast against formwork.

An exposed face is one which will remain visible when construction has been completed.

# CONSTRUCTION OF FORMWORK AND FALSEWORK

Before construction begins, the Contractor shall submit to the Engineer, drawings showing details of the proposed formwork and falsework.

Formwork and falsework shall be so constructed that they will support the loads imposed on them by the fresh concrete together with additional stresses imposed by vibrating equipment and by construction traffic, so that after the concrete has hardened the formed faces shall be in the positions shown on the drawings within the tolerances set out in Clause 506.

Ground supports shall be properly founded on footings designed to prevent settlement.

Joints in formwork for exposed faces shall, unless otherwise specified, be evenly spaced and horizontal or vertical and shall be continuous or form a regular pattern.

All joints in formwork including formwork for construction joints shall be tight against the escape of cement, water and fines. Where reinforcement projects through formwork, the form shall fit closely round the bars.

Formwork shall be so designed that it may be easily removed from the work without damage to the faces of the concrete. It shall also incorporate provisions for making minor adjustments in position if required, to ensure the correct location of concrete faces. Due allowance shall be made in the position of all formwork for movement and settlement under the weight of fresh concrete.

Where overhangs in formwork occur, means shall be provided to permit the escape of air and to ensure

that the space is filled completely with fully compacted concrete.

Formwork shall be provided for concrete surfaces at slopes of 30 degrees to the horizontal or steeper. Surfaces at slopes less than 20 degrees may be formed by screeding. Surfaces at slopes between 20 degrees and 30 degrees shall generally be formed unless the Contractor can demonstrate to the satisfaction of the Engineer that such slopes can be screeded with the use of special screed boards to hold the concrete in place during vibration. Horizontal or inclined formwork to the upper surface of concrete shall be adequately secured against uplift due to the pressure of fresh concrete. Formwork to voids within the body of the concrete shall also be tied down or otherwise secured against floating.

The internal and external angles on concrete surfaces shall be formed with fillets and chamfers of the sizes shown on the drawings unless otherwise instructed by the Engineer. Supports for formwork for non-water retaining structures may be bolted to previously placed concrete provided the type of bolt used is acceptable to the Engineer. If metal ties through the concrete are used in conjunction with bolts, the metal left in shall not be closer than 50mm to the face of the concrete.

Supports for formwork for water retaining structures may be bolted to previously placed concrete provided the type of bolts and positions of fixing are acceptable to the Engineer. After concreting the Contractor shall remove all support bolts and seal all holes with well rammed cement/sand mortar containing approved waterproofing cement additive. Metal ties which would be left in the concrete shall not be permitted.

Formwork shall not be re-used after it has suffered damage which in the opinion of the Engineer is sufficient to impair the finished surfaces of the concrete.

Where circumstances prevent easy access within the form for cleaning and inspection, temporary openings for this purpose shall be provided through the formwork.

Shear keys shall be provided in all construction joints of the size and shape indicated on the drawings. Where precast concrete elements are specified for use as permanent formwork, or proposed by the Contractor and agreed by the Engineer, they shall comply with the requirements of the Specification. Such elements shall be set true to line and level within the tolerances prescribed for the appropriate class of finish in Clause 506 and fixed so that they cannot move when concrete is placed against them.

# PREPARATION OF FORMWORK

Before any reinforcement is placed into position within formwork, the latter shall be thoroughly cleaned and then dressed with a release agent. The agent shall be either a suitable oil incorporating a wetting agent, an emulsion of water suspended in oil or a low viscosity oil containing chemical agents. The Contractor shall not use an emulsion of oil suspended in water nor any release agent which causes staining or discoloration of the concrete, air holes on the concrete surface, or retards the set of the concrete.

In order to avoid colour difference on adjacent concrete surfaces, only one type of release agent shall be used in any one section of the works. In cases where it is necessary to fix reinforcement before placing formwork, all surface preparation of formwork shall be carried out before it is placed into position. The Contractor shall not allow reinforcement or prestressing tendons to be contaminated with formwork release agent.

Before placing concrete all dirt, construction debris and other foreign matter shall be removed completely from within the placing area. Before concrete placing commences, all wedges and other adjusting devices shall be secured against movement during concrete placing and the Contractor shall maintain a watch on the formwork during placing to ensure that no movement occurs.

# REMOVAL OF FORMWORK

Formwork shall be carefully removed without shock or disturbance to the concrete. No formwork shall be removed until the concrete has gained sufficient strength to withstand safely any stresses to which it

may thereby be subjected.

The minimum periods which shall elapse between completion of placing concrete and removal of forms are given in Table 5.1 and apply to ambient temperatures higher than 10 degrees centigrade. At lower temperatures or if cement other than ordinary Portland are involved, the Engineer may instruct that longer periods be used. Alternatively, formwork may be removed when the concrete has attained the strength set out in Table 5.1, provided that the attained strength is determined by making test cubes and curing them under the same conditions as the concrete to which they refer.

Compliance with these requirements shall not relieve the Contractor of his obligation to delay removal of formwork until the removal can be completed without damage to the concrete.

Table 4.17.1 - MINIMUM PERIODS FOR FORMWORK REMOVAL

Position of Formwork	Min. period for temp over 10 degrees Centigrade	Strength to be attained
Vertical or near vertical faces of mass concrete	24 hours	0.2 C
Vertical or near vertical faces of reinforced walls, beams and columns	48 hours	0.3 C
Underside of arches, beams and slabs (formwork only)	4 days	0.5 C
Supports to underside of arches, beams and slabs	14 days	С
Arched linings in tunnels and underground works	24 hours	4 N/mm²

### Note:

C is the nominal strength for the class of concrete used.

If the Contractor wishes to strip formwork from the underside of arches, beams and slabs before the expiry of the period for supports set out above, it shall be designed so that it can be removed without disturbing the supports. The Contractor shall not remove supports temporarily for the purpose of stripping formwork and subsequently replace them.

As soon as the formwork has been removed, bolt holes in concrete faces other than construction joints which are not required for subsequent operations shall be completely filled with mortar sufficiently dry to prevent any slumping at the face. The mortar shall be mixed in the same proportions as the fine aggregate and cement in the surrounding concrete and with the same materials and shall be finished flush with the face of the concrete.

## SURFACE FINISHES ON FORMED SURFACES

#### Classes of Finish

The surface finish to be achieved on formed concrete surfaces shall be as shown on the drawings and defined hereunder:-

#### Class F1 Finish

This finish is for surfaces against which backfill or further concrete will be placed. Formwork may be

sawn boards, sheet metal or any other suitable material which will prevent the loss of fine material from the concrete being placed.

#### Class F2 Finish

This finish is for surfaces which are permanently exposed to view but where the highest standard of finish is not required. Forms to provide a Class F2 finish shall be faced with wrought thicknessed tongued and grooved boards with square edges arranged in a uniform pattern and close jointed or with suitable sheet material. The thickness of boards or sheets shall be such that there shall be no visible deflection under the pressure exerted by the concrete placed against them. Joints between boards or panels shall be horizontal and vertical unless otherwise directed. This finish shall be such as to require no general filling of surface pitting, but fins, surface discoloration and other minor defects shall be remedied by methods agreed by the Engineer.

## Class F3 Finish

This finish is for surfaces which will be in contact with water flowing at high velocity, and for surfaces prominently exposed to view where good appearance is of special importance. To achieve this finish, which shall be free of board marks, the formwork shall be faced with plywood complying with B.S. 1088 or equivalent material in large sheets. The sheets shall be arranged in an approved pattern. Wherever possible, joints between sheets shall be arranged to coincide with architectural features or changes in direction of the surface.

All joints between panels shall be vertical and horizontal unless otherwise directed. Suitable joints shall be provided between sheets to maintain accurate alignment in the plane of the sheets. Unfaced wrought boarding or standard steel panels will not be permitted for Class F3 finish. The Contractor shall ensure that the surface is protected from rust marks, spillages and stains of all kinds.

### **Curved Surfaces**

For curved surfaces where F2 or F3 finishes are called for, the formwork face shall be built up of splines cut to make a tight surface which shall then be dressed to produce the required finish.

Alternatively, single curvature surfaces may be faced with plastic or plywood linings attached to the backing with adhesive or with escutcheon pins driven flush. Linings shall not bulge, wrinkle or otherwise deform when subjected to temperature and moisture changes.

# **TOLERANCES**

All parts of formed concrete surfaces shall be in the positions shown on the drawings within the tolerances set out in Table 5.2.

In cases where the drawings call for tolerances other than those given in Table 5.2 the tolerances shown on the drawings shall take precedence.

Where precast units have been set to a specified tolerance, further adjustments shall be made as necessary to produce a satisfactory straight or curved line. When the Engineer has approved the alignment, the Contractor shall fix the units so that there is no possibility of further movement.

Table 4.17.2 - Tolerances

Class of Finish	Tolerances	Tolerances in mm (See Note)						
	A	В	С					
F1	10	10	+ 25 to - 10					
F2	5	10	+ or - 15					
F3	2	5	+ or - 10					

Note: The tolerances A, B and C given in the table are defined as follows:

Column A is an abrupt irregularity in the surface due to misaligned formwork or defects in the face of the formwork.

Column B is a gradual deviation from a plane surface as indicated by a straight edge 3m long. In the case of curved surfaces the straight edge shall be replaced by a correctly shaped template.

Column C is the amount by which the whole or part of a concrete face is displaced from the correct position shown on the drawings.

## **MASONRY**

#### General

All masonry work shall be constructed from building stone as specified in Clause 725. For culvert headwalls and other small works, the stone shall, unless otherwise specified, be rough dressed. For walls, facing and other exposed works the stone shall unless otherwise specified, be medium chiseldressed.

## Workmanship

The Contractor shall provide and use proper setting out rods for all work. Stones shall be well soaked before use and the tops of walls shall be kept wet as the work proceeds. The stones shall be properly bonded so that no vertical joint in a course is within 115mm of a joint in the previous course. Alternate courses of walling at angles and intersections shall be carried through the full thickness of the adjoining walls. All perpends, reveals and other angles of the walling shall be built strictly true and square.

The stones shall be bedded, jointed and pointed in mortar 1 to 3 in accordance with Clause 729 with beds and joints 9mm thick flushed up and grouted solid as the work proceeds. All masonry work shall be cured in accordance with the relevant requirements of Clause 407.

### Cast Stonework

Cast stone shall be as specified in Clause 735. Facing stones shall be brought up in courses to a height not exceeding 1 metre at a time, the concrete backing being then brought up and well incorporated into and round the backs of the stones and the projecting metal ties to ensure a complete bond. The stones shall be bedded and jointed as shown on the drawings. All materials, moulds, mixing, casting and surface treatment, setting, jointing and pointing, and all centering, scaffolding and labour required to complete the cast stonework specified or as shown on the drawings, shall be included in the rates for such work.

# **MATERIALS**

#### General

The approval in writing or otherwise by the Engineer of any materials shall not in any way whatsoever relieve the Contractor from any liability or obligation under the Contract and no claim by the Contractor on account of the failure, insufficiency or unsuitability of any such materials will be entertained.

All items shall be suitable for water works purposes and for use with cold water installation and operation being in a tropical climate.

All items hereinafter specified shall be to such other Standard or Specification which in the opinion of the Engineer provides for a quality of material and workmanship not inferior to the Standard Reference Number (SRN) quoted. The Standard or Specification must be submitted to the Engineer for approval before commencement of work.

All ferrous pipes and fittings shall be coated with a protective paint suitable for use in and transport through a tropical climate.

The Contractor shall supply to the Employer a certificate stating that each item supplied has been subjected to the tests hereinafter laid down and conforms in all respects to the said Specification.

The Contractor shall provide adequate protection to all piping, flanged items and valves so as to guard effectively against damage in transit and storage and ingress of foreign matter inside the valves.

All pipework and fittings shall be subjected to a works hydrostatic test pressure which shall be not less than twice the maximum operating pressure.

The Contractor should exercise diligence to provide the best material.

Where applicable the manufacturer's Specification should accompany all offers. The name of the manufacturer must in every case be stated.

Where necessary the Contractor shall provide rubber gaskets to comply with SRN 208 and all other bolts, nuts, washers, etc. to undertake jointing at fittings etc.

Any articles required under this Contract which are found to be faulty due to a crack, flaw or any other reason or is not in accordance with the Specification stipulated will not be accepted nor will the Employer be liable for any charges in respect of such an article. Where any such rejected article can, in the opinion of the Engineer, be rendered usable, the Contractor may deal with it accordingly and include it in the Contract at a price to be mutually agreed. Straight pipes which have been cut will be accepted at the discretion of the Engineer, provided the length is not less than 4 metres or two thirds of the standard length whichever is the lesser and will be priced pro-rata.

Wherever possible, samples of pipes and fittings shall be submitted for approval of the Engineer prior to the Contractor obtaining the total requirements.

#### Murram

Murram shall be from an approved source quarried so as to exclude vegetable matter, loam, top soil or clay. The California Bearing Ratio of the murram, as determined for a sample compacted to maximum density (as defined under SRN 601) and allowed to soak in water for four days, shall not be less than 30%. This C.B.R. is a guide to quality only and the compaction in the work will be judged by density.

# **Water for Cement Treated Materials**

If water for the works is not available from the Employer's supply the Engineer's approval must be obtained regarding the source of supply and manner of its use. Water to be used with cement or lime shall be free from salt, oil, alkali, organic matter, and other deleterious substances. If the water is required to be tested, this shall be done in accordance with SRN 114: Tests for Water for Making Concrete, all to the cost of the Contractor.

### **Cement Mortar**

Cement mortar shall consist of proportions by volume as specified of Portland cement and natural sand or crushed natural stone or a combination of both as specified in SRN 135 and SRN 136: Building Sands from Natural Sources. The constituent materials shall be accurately gauged and mixed in an approved manner.

Cement mortar shall be made in small quantities only as and when required, and any mortar which has begun to set or which has been mixed for a period of more than one hour shall be rejected.

# **Cement Grout**

Cement grout shall consist of Portland cement and water mixed in the proportion of one part by volume of cement and one and a half parts by volume of water. The grout shall be used within one hour of

mixing.

## **Reinforcement for Concrete**

Reinforcement which shall comply with the following Standards, covers plain and deformed bar reinforcement and steel fabric to be cast into concrete in any part of the Works but does not include prestressing tendons or any other embedded steel.

- SRN 126 for hot rolled plain bar and high yield deformed bar
- SRN 127 for cold worked steel bar
- SRN 128 for steel mesh fabric

All reinforcement shall be from an approved manufacturer and, if required by the Engineer, the Contractor shall submit a test certificate from the manufacturer.

All reinforcement for use in the Works shall be tested for compliance with the appropriate British Standard in a laboratory acceptable to the Engineer and two copies of each test certificate shall be supplied to the Engineer. The frequency of testing shall be as set out in the relevant Standard.

In addition to the testing requirements described above, the Contractor shall carry out additional tests as instructed by the Engineer.

Any reinforcement which does not comply with the Specification shall be removed from site.

All reinforcement shall be delivered to site either in straight lengths or cut and bent. No reinforcement shall be accepted in long lengths which have been transported bent over double.

Any reinforcement, which is likely to remain in storage for a long period, shall be protected from the weather to avoid corrosion and pitting. All reinforcement that has become corroded or pitted to an extent that, in the opinion of the Engineer, will affect its properties shall be removed from site or may be tested for compliance with the appropriate Standard at the Contractor's expense.

# **Dowel Bars**

Dowel bars and tie bars shall consist of mild steel, or deformed bars of high yield steel all complying with SRN 126 and they shall be free from oil, paint other than bond-breaking compound, dirt, loose rust and scale. Dowel bars and tie bars shall be of sizes as shown on the drawings and directed by the Engineer, and shall be straight, free from burred edges, or other irregularities and shall have their sliding ends sawn or, if approved, sheared.

Bond breaking compound for dowel bars shall consist of 66 per cent of 200 pen bitumen blended hot with 14 per cent light creosote oil and, when cold, brought to the consistency of paint by the addition of 20 per cent solvent naphtha or other approved compound meeting the following requirements. It shall not retard or in any other way affect the setting of concrete. The average bond stress on bars coated with the compound with half their length cast into concrete specimens and subject to pull out tests at 7 days shall not exceed 0.14 newtons per square millimetre and the total movement of the dowel bar relative to the concrete shall not be less than 0.25 millimetres at that stress. The concrete specimens shall be 150 millimetres by 150 millimetres in section and 0.45 metre long and made with the same mix proportions as used in the Works.

# Structural Steel for Welded Work

Structural steel for riveted and welded work shall comply with the requirements of SRN 125: Structural Steel, SRN 126: The Use of Structural Steel in Building and for Welded Work, SRN 125: High Yield Stress and High Tensile Structural Steel, High Tensile (Fusion Welding Quality) Structural Steel for Bridges, etc. and General Building Construction.

# **Joint Primer**

Joint priming compound shall be entirely in accordance with the manufacturer's recommendations for

the joint sealant to be used.

# **Timber**

Timber shall be sound, well-seasoned and entirely free from worm, beetle, warps, shakes, splits, and all forms of rot and deadwood. Where required, all timber shall be treated with creosote, as specified in SRN 872: Coal Tar Creosote for the Preservation of Timber or an alternative approved timber preservative

# **SECTION VII- BILLS OF QUANTITIES**

# 1. Objectives

The objectives of the Bill of Quantities are:

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

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

# 2. Day work Schedule

A Day work 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 Procuring Entity of the realism of rates quoted by the Tenderers, the Day work Schedule should normally comprise the following:

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

## 3. 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 Procuring Entity to select such specialized contractors. To provide an element of competition among the Tenderers in respect of any facilities, amenities, attendance, etc., to be provided by the successful Tenderer 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 Tenderer 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 Procuring Entity or the person drafting the tendering document. They should not be included in the final tendering document.

# 4. The Bills of Quantities

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

- a) Preambles
- b) Preliminary items
- c) Work Items
- c) Daywork Schedule; and
- d) Provisional items
- e) Summary.

# 5. The Summary to the Bills of Quantities will take this form or some other form but including these items.

SUMMARY PAGE	Page	Amount
A. TOTAL COST FOR DESILTING AND EXPANSION OF		
NAMAREI WATER PAN		
B. TOTAL COST FOR REHABILITATION OF OLTUROT		
WATER SUPPLY PROJECT		
C. TOTAL COST FOR REHABILITATION OF		
NGOROROI WATER SUPPLY PROJECT		
D. TOTAL COST FOR CONSTRUCTION OF 2 BLOCKS OF		
VIP LATRINES		
TOTAL TENDER PRICE (Carried forward to Form of Tender)		

# A. BILL OF QUANTITIES FOR DESILTING AND EXPANSION OF NAMAREI WATER PAN

	EXPANSION AND DESILTING OF 30,000	Um <sup>3</sup> NA	MARE	I WATER	<u>PAN</u>			
Bill								
No 1	PRELIMINARI	LES						
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)			
	Contractors general cost items:	T	r	ı <u> </u>				
A	Provide, install and maintain for the entire contract period a contract signboard on 1.5m x 0.45m metal sheet appropriately secured on a 19mm steel frame at least 1.5m above the ground level to the satisfaction of the Engineer or his appointed representative.	No	1					
	LABOUR CAMPS							
В	The site is very remote and the contractor might require to establish Labour camps on the site or allow for transportation cost of Labour to site. The contractor may allow for provision of power and lighting for works and for the use of those who shall be residing on site. The client shall not accept any claim arising out of contractor's omission on this item.	Item	1					
	Water							
С	Allow for provision all the water for works and for the use of those who shall be residing on site. The client shall not accept any claim arising out of contractor's omission on this item.  Mobilization. Demobilization & Storage of	Item	1					
	Equipment and materials							
D	The contractor may allow for provision of Mobilization, Demobilization (after use) and storage facilities for all Equipment, Materials required on site. The client shall not accept any claim arising out of contractor's omission on this item.	Item	1					
	Security							
· · · · · · · · · · · · · · · · · · ·	SUB-TOTAL CARRIED FORWARD TO NEXT I	PAGE						

	SUB-TOTAL CARRIED FORWARD FROM PRE	EVIOUS	S PAGE	E	
Е	The contractor shall be responsible for provision and facilitation of security which may include hiring of security personnel to man the site and protect the workers, materials and works during the entire construction period. The client shall not accept any claim arising out of contractor's omission on this item. r (2 Reservist one for the day and 1 for the night for 90 days)	Ls	1		
	Setting out and supervision				
F	Provide for technical services of setting out of Pan, Survey and Supervision of Pan construction by a qualified Engineer/Surveyor approved by the Employer	Ls	1		
G	Implement the Environment management plan as recommended in the ESIA Report	LS	1		
Н	Allow Provisional sum to cover contractors' profits, overheads and taxes for items E and D	%	15		
	Bill No 1: PRELIMINARIES CARRIED TO SUM	MARY			

BILL No 2:	EARTHWORKS						
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)		
A	Clear site of all trees, tree stumps, shrubs and grass commencing from ground level n.e. 300mm deep and dispose-off the construction site as directed.	m²	3,015				
В	Allow for desiltation of existing pan before excavation n.e 0.9m and dispose as may be directed by the Engineer	m³	4,320				
C	Commence reservoir excavation from the stripped level and n.e average depth of 4.5 m, cart away excavated material and heap around the pan with clearance of 10 metres from Pan edges or dispose as may be directed by the water Engineer	m³	25,743				
D	Excavate in normal soil to create silt trap with outer dimensions 25m x 25m x 2.0m with slope of 1:3 as per the design drawings and cart away as directed.	m³	1250				
Е	Excavate collection trenches as indicated in the drawing and as directed by the Engineer.	m³	30				
F	Place hand packed rip rap 200mm thick at inlet channel to silt trap (25 x2.5) to protect the footpath.	m²	75				
G	Provide stone pitching protection of silt trap and inlet channels to the base and wall of the reservoir as shall be directed by engineer	m²	120				
Н	Supply materials, Cut to Recessa and constructs weighted Gabion Mattress 2x 1 x 1m to control soil erosion on the inlet channels as indicated in the technical drawing	m³	40				
	2 No. Cattle Ramp						
I	Provide for stone pitching protection to 2 No cattle ramp each 10m wide with hard core stone materials and 20m long for 240mm thick as shall be directed by engineer.	m²	200				
	Bill No 2: EARTHWORKS CARRIED TO SUM	IMARY	-				

Bill No 3	WATER PAN ANCILLARIES Spillway sill & Ripraps							
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)			
A	Allow for excavation and construction of spillway concrete sill 2.5m x 35m x1 Length with 0.5 slope across the whole span of spillway mouth with concrete class 20/20 And its associated formwork.	m³	100					
В	Allow for excavation and construction of spillway concrete sill 11.3m x 0.8m x 0.5m Length across the whole span of spillway mouth with concrete class 20/20 And its associated formwork.	m³	4.52					
C	Supply 150mm average size hard boulders, prepare surface, placing, compaction and joining with mortar 1;3 a 150mm Thick spillway of 150mm riprap on the spillway wall, base and inlet to the pan buttress wall to the design specification and under supervision of the Engineer.	m²	130					
D	Supply 150mm average size hard boulders, prepare surface, compaction, build, and joining with mortar 1;3 a 150mm thick cattle ramp,6m wide by 12m long riprap to the satisfaction of the Engineer.	m²	65					

Bill	WATER ARRACTRACTIO		ADONIENI	rc					
No 4	WATER ABRASTRACTION COMPONENTS  Bill No 4.1: SHALLOW WELL								
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)				
A	General excavation; other materials other than top soil; Commencing from stripped level and n.e 0.5m, cart away to form the embankment or dispose as may be directed by the water Engineer	m <sup>3</sup>	1	(III)	(IIIII)				
В	General excavation; other materials other than top soil; Commencing from 0.5m, and n.e 1m from stripped level, cart away to form the embankment or dispose as may be directed by the water Engineer	m³	1						
C	General excavation; other materials other than top soil; Commencing from 1m, and n.e 2m from stripped level, cart away to form the embankment or dispose as may be directed by the water Engineer	m³	2						
D	General excavation; other materials other than top soil; Commencing from 2m, and n.e 6m from stripped level, cart away to form the embankment or dispose as may be directed by the water Engineer	m³	8						
E	Construction Draw-off shallow well of at least 5m deep and raised 1m from ground level with a 900mm internal diameter Reinforced Pre-Cast concrete culverts; Bedded and jointed with waterproof cement/sand mortar 1;3; culverts connected to a 100mm diameter G.I pipe C/B from the water pan through the excavated trench; 1100mm Dia x 50mm thick Reinforced Precast concrete (1;2;4) cover with 600 x 600mm heavy duty lockable Non corrosive Manhole cover and 100mm Dia.	Ls	1						
F	Backfill and seal the well after draw-off pipe installation by compacting into layers of 300mm to reach top of well walling	m³	3						
G	Supply and install as directed by the engineer Afridev hand pump with associated masonry works for Apron	Ls	1						
	Sub-total Shallow well Carried to collection								

	Bill 4.2: infiltration Structure	1		
	Supply and install as directed by the engineer f or the infiltration structure to receive filtration material			
A	Hardcore	T	2.5	
В	Clean river sand	T	2	
C	Coarse aggregate	T	2.5	
D	Excavate 4.7m depth trench for Draw off Pipe - 120m long	m³	230	
Е	Provide, lay and connect to infiltration gallery 2" GI pipes including fittings for offtake/draw off system under the entire embankment to draw-off well as detailed in the working drawings and reduce to levels for water drawing. Constructs ant- Seepage at regular intervals on No 1 per 6m.	m	120	
F	Provide for formwork and cast plain concrete class 15/20 to provide support collars for offtake/draw off pipes at intervals of 3m.	m³	3	
	Sub-total for Infiltration system carried to the co	ollection	l	
	Bill No 4: SUB-TOTAL WATER PAN ABSTRA	ACTION	COMPON	IENT

BILL No 5	FENCING					
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)	
A	Provide and install 100mm x 120mm by 2.70m long Concrete posts spaced at 3.0 m intervals(635M).	No	212			
В	Provide Corner support Concrete poles and anchor poles (100mm x 100mm by 1.8m)	No	72			
С	Excavation of holes to anchor posts (300mmx300mmx600mm)	No	284			
D	Concrete class 1:3:6 for anchoring the posts	m³	7			
Е	Supply and fix 15-gauge galvanized wire 5 strands	m	3180			
F	Supply and fix 12.5-gauge Chain link (2.4m height) and provide for anchoring to the ground as shall be directed by supervising Engineer.	m	640			
G	Fabricate and install 5 m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 100 x 100mmx 3mm SHS posts; 50mm x 50mmx 1.5mm main frames; 30 x 30 x 1.5mm SHS Intermediate frames at 150mm centers Rectangular Hollow Section Main posts to be cast in 300 300 x 45mm mass concrete foundation, all including associated ironmongeries, and locking system all to the Engineers satisfaction	Ls	2			

# TOTAL COST OF DESILTATION AND EXPANSION OF NAMAREI WATER PAN

	SUMMARY OF NAMAREI WATER PAN COMPONENTS COST						
BILL NOS	DESCRIPTION	TOTAL (KSHS)					
1	PRELIMINARIES						
2	EARTHWORKS						
3	WATER PAN ANCILLARIES						
4	WATER ABSTRACTION COMPONENTS						
5	FENCING						
	TOTAL COST FOR DESILTATION AND EXPANSION OF NAMAREI WATER PAN						

# B. REHABILITATION OF LAISAMIS OLTUROT WATER SUPPLY SCHEME

Bill No 1:	PRELIMINARIES						
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)		
	Project Branding						
1.1	Provide, install and maintain for the entire contract period a contract signboard on 2m x 1m metal sheet appropriately secured on a 19mm steel frame at least 1.5m above the ground level to the satisfaction of the Engineer or his appointed representative.	No	1				
	Test pumping of Olturot Borehole						
1.2	Pumping test including step draw-down for differing pump rates and 24-hour constant discharge for existing static water level for Olturot borehole with recovery readings taken until the water level and the constant discharge is attained in 24hrs to give actual borehole yield, pump installation level and correct pump rating/size  NB. this to precede all other works	Item	1				
1.3	Disinfection with Chlorine the entire water system. This chlorinated water solution should remain in the pipe for at least 24 hours, at the end of which period the chlorine concentration should be at least 25 mg./L	Ls	1				
1.4	Test Entire Olturot Water Supply system	Ls	1				
	BILL NO 1: SUB TOTAL PRELIMINARIES (	CARRIE	D TO SU	JMMARY			

item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)		
	Pipeline Repair and Construction Manhole chamber						
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and materials from excavation in accordance to specification. Depth not exceeding 1m, 0.4m width. Pipe from Livestock masonry tank to cattle Trough						
2.1	Clear, Excavate and Backfill for G.1 Dia 50mm pipe	m³	4				
2.1.1	G.I Dia 50mm Class B Pipe	M	10				
2.1.2	G.I Dia Equal Tee 50mm	No	7				
2.1.3	G.I Dia Union 50mm	No	5				
2.1.4	G.I Dia Gate valve 50mm	No	8				
2.1.5	G.1 Dia Socket 50mm	No	15				
2.1.6	G.I Dia Nipple 50mm	No	15				
2.1.7	50mm Air Release Valve Double Orife 32mm and Installation fittings	No	1				
2.2	Sub-total Pipeline Rehabilitation  PIPELINE EXTENSION TO VARIOUS SITES						
2.2	Clear, excavate and backfill for HDPE pipe trench n.e 0.4m wide and 1m deep	m <sup>3</sup>	992	LS			
2.2.1	Supply, lay, join by fusion in the trench HDPE PN12.5, 90 mm diameter pipe and fittings from Borehole to Proposed elevated steel tanks.	m	470				
2.2.2	Supply, lay and join by fusion in the trench HDPE PN 12.5, 90 mm diameter pipe and fittings from Borehole to proposed Lorukoibor Elevated Steel Tower	m	1,250				
2.2.3	Supply, lay and join by HDPE coupling in the trench HDPE PN10, 63mm diameter pipe and fitting from rising main to elevated water tank at livestock market and Connecting to the cattle troughs at the Market.	m	300				
2.2.4	Allow Rehabilitation Steel tower foundation at Cattle market and drainage	m³	3				
	SUB-TOTAL CARRIED FORWARD TO NE	XT PAG	E	1			

	SUB-TOTAL CARRIED FROM PREVIOUS	PAGE		
2.2.5	Supply, lay and join by HDPE Coupling in the trench HDPE PN 10, 50 mm diameter pipe and fittings from Elevated steel Tank to New Water Kiosk at olturot village	m	450	
2.2.6	Supply, lay and join by HDPE Coupling in the trench HDPE PN10, 50 mm diameter pipe and fittings from Livestock Masonry tank to Water trough	m	160	
	Supply, lay, join in by HDPE Coupling the trench HDPE PN10, 63 mm diameter pipe and fittings from Elevated steel tanks to Hospital	m	100	
2.2.7	Supply, lay, join by HDPE Coupling in the trench HDPE PN10, 63 mm diameter pipe and fittings from Elevated steel tanks to Moi junction pipeline	m	300	
	Supply and install fittings as per specification		· ·	·
2.2.8	90mm HDPE ball valves complete with fittings	No	2	
2.2.9	Allow for installation Single Air Release Valves Dia 90mm at Proposed pipeline from Borehole to Elevated steel tanks and Proposed Lorukoibor Pipeline to elevated steel tower	No	2	
2.2.10	63 mm HDPE Complete ball valves with all fittings	No	8	
2.2.11	50mm ball valve complete with fittings	No	3	
2.2.12	Provide and install VJ Coupling 50mm Dia	No	6	
2.2.13	Provide and install VJ Coupling 75mm Dia	No	5	
	Allow for installation Pipeline marker post, AV, SV, Wash out Valves.	No	20	
2.2.14	Chlorination			
2.2.15	Install and testing inline chlorinator with all fitting at the borehole site to include mixing tanks and solar power source. This to be done at the raising main	Item	1	
	Sub-total Total for Pipeline Extension			
	BILL NO 2: SUB TOTAL PIPELINE REHAB EXTENSION	BILITAT	TION AND	

item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
3.1	Excavations				
3.1.1	Excavate for 1000 x 1000 x 1000 mm deep outlet valve chamber including maintaining sides and keeping bottoms free from water, mud and fallen materials, grading bottoms, and carting away surplus excavated material	m <sup>3</sup>	1		
3.2	Blinding 50mm thick; Class 15 Concrete (1:3:6) in foundations as applies to:				
3.2.1	Valve Chamber foundation (1m x1m wide by .3 m long)	m³	0.3		
3.3	Concrete				
	Vibrated reinforced insitu concrete class 25/20; with minimum cube crushing strength of 25N/mm² at 28 days as specified; including formwork and reinforcement				
3.3.1	To floor slab	$m^3$	0.45		
3.3.2	To roof slab	$m^3$	0.2		
3.4	Blockwork				
3.4.1	200 mm thick natural stone walling to chamber	m <sup>2</sup>	4		
3.4.2	Plaster; 25mm with cement, Water proofing and sand mortar 1.1:3 mix internally.	m <sup>2</sup>	4		
3.5	Cover				
3.5.1	Medium duty air-tight single seal flat type lockable inspection cover and frame to BS 497 Table 6 Grade 0 and bedding frame in cement mortar and setting cover in grease to opening size 600 x 450mm	nr	1		
	Sub-total for 1 Valve chamber	<u> </u>		1	
			o. cor	NTROL	

Bill No.4	MASONRY TANK REPAIR 100M <sup>3</sup>					
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)	
	Internally					
4.1.1	Hack floor and the masonry wall	m²	100			
	Waterproofing plaster to surfaces of concrete/Masonry wall applied by an approved and experienced persons (Cement to sand ratio 1:2) with cement screed finish.					
4.1.2	25mm Floor	m²	40			
4.1.3	25mm Wall	m²	60			
4.1.4	Provide chicken mesh on the internal wall for plaster reinforcement (0.5")	m²	60			
4.1.5	Trowel Finish floor-Wall intersection and apply 20mm x20mm bondex sealant to stop leakages	m	21			
	Externally					
4.2.1	Tank skirting repair	m²	20			
4.2.2	Medium duty air-tight single seal flat type lockable inspection cover and frame to BS 497 Table 6 Grade 0 and bedding frame in cement mortar and setting cover in grease to opening size 600 x 450mm	No	1			
4.2.3	Replacement of water tank vents	No	3			
	BILL NO 4: SUB-TOTAL FOR TANK REP SUMMARY	PAIR CA	RRIED	TO		

Bill No. 5	ELEVATED PRESSED STEEL TANK,12M TOWER FOR 100M <sup>3</sup> STORAGE					
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)	
5.0	ELEVATED STEEL TANK. Works comprises of design and fabrication of a 100 Cubic meter tank on a 12 meters tower. The contractor to carryout geophysical survey and design for the tank foundation and provide designs for approval before works commences at the ground. The steel plates, strut and tie members of the frame as well must be assessed at the fabrication site and approved before transportation to site. Material specifications  • Hot rolled sections to BS 4360 Grade 43A or equivalent.  • Cold formed sections to BS 5950 Part 5: 1997 or equivalent.  • Bolt and nuts to BS 3692 and BS 4190 or equivalent.  • Welding specifications to BS 5135 or equivalent.  • Welding electrodes to BS 635 or equivalent.  Wind load to CP3 chapter V part 2					
5.1	Preliminaries					
5.1.1	Provide for Geotechnical investigations for foundations at the identified sites through standard penetration test (STP)/excavation of trial pits/boring and collecting samples which are subjected to laboratory tests to determine soil's physical properties that will be used to pre inform soil's bearing capacity of the proposed sites.  NB: The test results and recommendations are to be submitted for approvals before foundation excavations commences.	LS	1			
					-	
	SUB-TOTAL CARRIED FORWARD TO N	EXT PA	GE			

	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE					
5.2	Pressed steel Tank (BS 1564 part 2)					
	B. This is design and build item. This quotation which is lump sum will be accompanied by preliminary design of the tank, technical drawings and design calculations. This will be assessed at the technical evaluation of each bid. The tank must be pre-approved at the fabricators site before delivery to site.				-	
5.2.1	Fabricate, supply and erect on an elevated steel tower a pressed steel tank effective capacity 100m³ of 6 mm thick panels for the bottom tank stack and 4.5mm fir the subsequent row elevated at 12 m height on tower complete with steel roof cover 3mm sheets, internal bracing, brackets, access cover and internal and external ladder, calibrated level indicator, fasteners, threaded nozzles, sealants and lockable manhole. Tank to be painted with two coats of non-toxic black bituminous paint internally and one coat of grey primer and two coats of silver aluminum externally. The tank must be fit for purpose and performance and safety of the tank is the responsibility of the design-build contractor.	No.	1			
5.3	12m Tower- (BS499)				_	
5.3.1	Design, provide shop drawings, fabricate, deliver and erect a 12 m high steel tower above foundation level steelwork complete with primer and aluminum paint to carry 100m³ steel tank. The tower to comprise of UC/UB columns angle bracings, chequered plate platform and beams, access cat ladder and railing on the platform and fixtures necessary for erection.	No.	1			
	SUB-TOTAL CARRIED FORWARD TO N	EXT PA	GE			

	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE			
5.4	Plumbing			
5.4.1	Supply, deliver and install 3" G.I class B pipe for the inlet work, outlet and overflow for the 100m³ steel water tank on 12 m steel tower. Rate to include gate valves and all necessary fittings including fasteners and anchor to the ground lever.	Lump	1	
5.5	Concrete Foundation			
5.5.1	Design and provide construction drawing for concrete class 20/20 foundation for the 12m high steelwork to carry 100m³ steel water tank. On a raft foundation/ strip foundation as will be directed by the Engineer upon approval of the foundation details and design proposed issued.	No.	1	
5.6	Masonry Chambers			
5.6.1	Provide all materials and construct valve chambers of internal dimensions as shown on the standard drawings and the fitting schedule for the specific nodes. Include for supply and fixing of precast concrete cover and step irons, etc as detailed in drawings. Depth i.e., 1.5m	No.	3	
	BILL NO 5: SUB-TOTAL PRESSED STEE CARRIED TO SUMMARY	L TANK	(100m <sup>3</sup> )	

Item	Description	00MMx2 Unit	Qty	Rate (Kshs)	Total (Kshs)
6.0	SUBSTRUCTURE.				
6.1	<b>Excavations (All Provisional)</b>				
6.1.1	Clear area of new construction of all undergrowth, small bushes, grab up all trees	sm	15		
6.1.2	Excavate oversite to remove vegetable soil, load and cart away from site to contractor's dumping area as directed; Average 200 mm depth	SM	16		
6.1.3	Excavate for strip foundation trenches commencing from stripped level: not exceeding 1.5 m deep	СМ	5		
6.1.4	Excavate for column bases commencing from stripped level: not exceeding 1.5 m deep	CM	2		
6.1.5	Extra over all excavations for excavating in rock class II and III as described in the specification	CM	1		
6.1.6	Return, fill and ram selected soil in foundations; well compacted in layers not exceeding 150 mm thick	СМ	3		
6.1.7	Remove surplus soil from site to a place approved by local authority	CM	4		
6.1.8	Allow for upholding and supporting sides of excavations including all plunking and strutting	item	1		
6.1.9	Allow for keeping excavations free of water including any necessary pumping	Item	1		
	Sub Total 1 - Excavations				
6.2	Foundation structures				
6.2.1	Mass concrete mix (1:3:6):in				
6.2.2	50 mm thick blinding under strip foundation	SM	5		
6.2.3	50 mm thick blinding under column bases	SM	3		
	SUB-TOTAL CARRIED FORWARD TO N	EXT PA	GE		

	SUB-TOTAL CARRIED FORWARD FROM	M PRE	VIOUS PAC	<b>SE</b>	
6.3	Vibrated reinforced insitu concrete class 25/20; with minimum cube crushing strength of 25N/mm <sup>2</sup> at 28 days;				
6.3.1	Strip foundation	CM	1		
6.3.2	Column bases	CM	1		
6.3.3	Column starters	CM	0.5		
6.3.4	100 mm thick ground floor slab	CM	1		
6.4	Mesh fabric reinforcement				
6.4.1	Mesh reinforcement No. A142 size 200 x 200 mm weighing 2.22 kg per square meter: in floor slab: including all necessary supports	SM	8		
6.5	Supply and fix steel bar in structural concrete work				
	including cutting, bending, hoisting, tying wire, spacing				
	blocks and supporting all in position				
6.5.1	8 - 12 mm Bars	KG	50		
6.5.2	10mm bars	KG	95		
6.5.3	12mm bars	KG	105		
6.6	Sawn formwork: to				
6.6.1	Sides of Strip footing	LM	20		
6.6.2	Sides of column bases	SM	2		
6.6.3	Sides of column starters	SM	2		
6.6.4	Edges: slabs 75 - 150 mm girth	LM	16		
_	Sub Total 2 - Foundation structures				
<u>6.7.0</u>	Substructure Walling and Filling				
6.7.1	Natural stone walling bedded in cement and sand mortar (1:4) with minimum stone crushing strength of 10N/mm²; including 20mm wide hoop iron at every course				
6.7.2	200 mm thick foundation walling stone to approval	SM	8		
	SUB-TOTAL CARRIED FORWARD TO N	EXT P	AGE		

	SUB-TOTAL CARRIED FORWARD FROM	M PRE	VIOUS PA	GE	
6.8	Hardcore				
6.8.1	300 mm tick hardcore of approved inert material: well-watered and compacted in 150 mm thick (maximum) layers	SM	8		
6.8.2	50 mm Thick approved quality murram blinding to surfaces of hardcore	SM	8		
6.9	Anti-termite treatment				
6.9.1	Termidor 25EC anti-termite chemical treatment: applied by approved professional pest control specialist: applied strictly in accordance with the manufacturer's instructions: 10-year guarantee	SM	8		
6.10.	Damp Proof Membrane				
6.10.1	Gauge 1000 polythene damp proof membrane	SM	8		
	Sub Total 3 - Foundation Walling and Filling	g			
6.11	SUPERSTRUCTURE WORKS				
	Reinforced Concrete Works				
	Sawn formwork: to				
6.11.1	Sides and soffits: beams and lintols	SM	6		
6.11.2	Sides of columns	SM	8		
6.11.3	Soffits of horizontal Suspended slab	SM	10		
6.11.4	props to the underside of beam	No	10		
6.12	Supply and fix steel bar in structural concrete work including all cutting, bending, hoisting, tying wire, spacing blocks and supporting all in position as necessary, assorted				
6.12.1	8 mm Bars	KG	21		
6.12.2	10mm bars	KG	67		
6.12.3	12mm bars	KG	76		
6.13	Vibrated reinforced insitu concrete class 25/20; with minimum cube crushing strength of 25N/mm <sup>2</sup> at 28 days; in				
6.13.1	Ring beams and lintols	CM	5		
6.13.2	Columns	CM	0.5		
6.13.3	150mm thick horizontal suspended slab	SM	8		
	Sub Total - Reinforced Concrete Works	1	<u> </u>		
	SUB-TOTAL CARRIED FORWARD TO N	EXT P	AGE		

	SUB-TOTAL CARRIED FORWARD FROM	M PRE	VIOUS PA	AGE	
6.14	WALLINGS				
	External walls				
	Machine dressed natural stone walling bedded in cement and sand mortar (1:3) with minimum stone crushing strength of 7N/mm <sup>2</sup> ; including 20mm wide hoop iron at every course				
6.14.1	200 mm thick	SM	16		
6.15	Damp proof course - Bituminous hessian base to BS 743 type A: or other equal approved damp-proof course: in cement/sand (1:3) mortar				
6.15.1	200 mm wide	LM	8		
	Sub Total - Wallings			-	
6.16	ROOFING				
	Structural Timber				
	Sawn cypress first grade; pressure impregnated; thoroughly seasoned and treated with anti-termite; and other jointing accessories to structural engineer's details; timber to meet the following minimum strength criteria, bending 5N/mm2, tension 3N/mm2 and compression 6N/mm2				
6.16.1	50 x 50 x 3mm thick steel stanchion fixed to the reinforced concrete column to approval	LM	10		
6.16.2	75 x 50 mm timber rafter fixed to the steel stanchions	LM	12		
6.16.3	20 x 50 mm timber batten fixed to the rafter to approval	LM	9		
6.16.4	nails	KG	2		
6.16.5	MRM box profile sheets available in white and clear; 12,000mm length x 810mm width.	SM	9		
	Sub Total - Roofing	1			
	SUB-TOTAL CARRIED FORWARD TO N	EXT PA	AGE		

	SUB-TOTAL CARRIED FORWARD FROM	M PREV	<b>IOUS PAGE</b>				
6.17	FIXTURES						
	Fittings						
	Door						
6.17.1	steel door to detail	No.	1				
	Window						
6.17.2	steel Bay window to details as per Architectural drawings	No.	1				
	Shelves						
6.17.2	Supply and install shelves 4 No. MDF to 2 walls	LS	1				
	Counters						
6.17.3	concrete counter at the bay window	Item	1				
6.17.4	mass concrete fetching bay to detail	Item	1				
	Sub Total 7 - Fixtures						
6.18	FINISHES						
	Floor Finish						
	Screed: cement and sand (1:4) on concrete: wood floated finished						
6.18.1	25 mm thick floor finish with red oxide inside the water kiosk	SM	4				
	Non-slip floor finish						
6.18.2	25mm thick rough cast floor finish at the fetching area	SM	4				
	Internal wall finishes - Plaster: 12 mm cement/lime putty/sand: steel trowelled: on						
6.18.3	Walls and concrete surfaces	SM	16				
6.18.4	soffits of suspended concrete slab	SM	4				
6.18.5	Top of suspended slab with drainage grooves as per the technical drawings	SM	5				
	Prepare surfaces: apply three coats of approved vinyl emulsion paint: on steel trowelled plaster: to						
6.18.6	Walls and concrete surfaces internally	SM	16				
	SUB-TOTAL CARRIED FORWARD TO N	L EXT PA	AGE				

	SUB-TOTAL CARRIED FORWARD FROM	M PREV	VIOUS P	PAGE	
	External wall finishes - External cement and sand (1:3) plaster: steel trowelled: on masonry or concrete: to				
6.18.1	concrete columns and beam	SM	8		
6.18.2	Keys to external wall	SM	16		
6.18.3	apply 2 coats of approved emulsion paint to the door and window	Item	1		
	Sub Total - Finishes				
6.19	PLUMBING WORKS				
	Pipes and Fittings				
	Supply and fix steel all plumbing materials as per the mechanical drawing				
6.19.1	Pipe 25mm diameter PPR (3m lengths)	No.	2		
6.19.2	Gate valve 25mm dia. (Pegler)	No.	1		
6.19.3	Water meter 25mm diameter	No.	1		
6.19.4	Heavy duty taps 25mm diameter	No.	1		
6.19.5	Non-return valve 25mm diameter	No.	3		
6.19.6	Union 25mm diameter	No.	11		
6.19.7	Nipple 25mm diameter	No.	4		
6.19.8	Equal tee 25 mm diameter	No.	3		
6.19.9	Elbows 25 mm diameter	No.	6		
6.19.10	Bend 25 mm diameter	No.	2		
6.19.11	Long threaded nipple 25 mm diameter	No.	4		
6.19.12	Black nut 25 mm diameter	No.	3		
6.19.13	Boss white 400g	LM	2		
6.19.14	Hemp thread	ls	1		
	Storage Tank				
6.19.15	Supply and install a 5000 liters Upvc Tank. Provide for 75mm steel colums and CGI G30 canopy to tank	No.	1		
6.19.16	Ball valve 25mm diameter	No.	1		

6.19.17	Metal cage to protect tank	No.	1		
	SUB-TOTAL CARRIED FORWARD TO	NEXT P	AGE		
	Soak pit				
6.19.18	Soak pit internal size 1800mm diameter x 15,000 mm deep (average) to water level: filled with boulders as per engineers instructions: 1000-gauge polythene sheet on top end of boulders covered with 300mm layer of murram: 200mm thick coral block lining: 150mm vibrated reinforced concrete (Class	No	1		
	Sub Total - Plumbing works				
	TOTAL Water Kiosk				
	BILL NO 6: TOTAL FOR 2 WATER KIOS SUMMARY	SKS CA	RRIED T	O	

Bill No 7	CONSTRUCTION OF 2 NO	CATT	LE TRO	OUGHS	
item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
	Cattle Trough and Cattle ramp Cattle trough 10m long and located n.e 30m from the community water point as designed to detail with all plumbing works from the community water point incorporate in g a 2" ball valve and 30m long Upvc Pipe class C with all fittings to trough. Include for 75 mm thick concrete slab for man hole cover a specification attached drawing				
7.1	Clear and excavate over site soil material to reduce levels not exceeding 225mm deep and cart away	M3	10		
7.2	Excavation for raft foundation not exceeding 0.6m deep starting from the reduced level	M3	6		
7.3	300m m thick approved hard-core, well compacted in layers not exceeding 150mm and blinded using 50mm marra m /quarry dust	M3	6		
7.4	Plain concrete class 15/40 vibrated in foundation base 125mm thick on BRC 142	M3	5		
7.5	Approved local stone; squared and rough chisel dressed on one side, bedding and jointing in cement mortar (1:3) in walls 150mm thick. Provide for 1.5ft long 2" dia. GI pipe class A as scour with end cap.	M²	17		
7.6	Plaster; 25mm with cement, Water proofing and sand mortar 1.1:3 mix internally and floor height 1.6M	M²	27		
7.7	Plaster; 25mm with cement sand mortar 1:3 mix externally height .5M	M²	20		
7.8	Provide 2m wide Stone pitched lining around the water trough	M2	50		
7.9	Provide for stone pitching protection to cattle ramp 15m wide 25m long and 300m m thickness with natura l hard stones material as shall be directed by engineer.	M²	125		
	SUB-TOTAL CARRIED FORWARD TO N	EXT PA	GE	1	

	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						
7.10	Allow for excavation, provide for materials and construct lockable masonry chambers with internal dimensions 1200mm x 1200mm x 2000 mm as indicated in the drawings and as directed by the Engineer. Rates to include formwork and provide for access ladder	No.	1				
	Total for 1 trough						
	BILL NO 7: SUB-TOTAL 2NO LIVESTOO TO SUMMARY	CK TRO	OUGH CA	ARRIED			

REPAIR WORK AT PUMP HOUSE AREA						
Description	Unit	Qty	Rate (Kshs)	Total (Kshs)		
Fence repair (35m by 35m)						
Provide and install 100mm X 100mm by 2.70m long Concrete posts spaced at 3.0 m intervals (140M).	No	44				
Provide Corner support Concrete poles and anchor poles spacing at interval of 10m (100mm x 100mm by 1.8m)	No	8				
Excavation of holes to anchor posts (300mmx300mmx600mm)	No	52				
Concrete class 1:3:6 for anchoring the posts	$M^3$	1				
Supply and fix 15-gauge galvanized wire spaced at 450mm 5 strands	M	700				
Supply and fix 12.5-gauge Chain link (2.4m height) and provide for anchoring to the ground as shall be directed by supervising Engineer.	M	480				
Concrete class 1:3:6 for anchoring the chainlink (100*150mm)	$M^3$	2.1				
Fabricate and install 5m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 100 x 100mmx 3mm SHS posts; 50mm x 50mmx 1.5mm main frames; 30 X 30 X 1.5mm SHS Intermediate frames at 150mm centers Rectangular Hollow Section Main posts to be cast in 300 300 x 45mm mass concrete foundation, all including associated ironmongeries, and locking system all to the Engineers satisfaction	LS	1				
	Fence repair (35m by 35m)  Provide and install 100mm X 100mm by 2.70m long Concrete posts spaced at 3.0 m intervals (140M).  Provide Corner support Concrete poles and anchor poles spacing at interval of 10m (100mm x 100mm by 1.8m)  Excavation of holes to anchor posts (300mmx300mmx600mm)  Concrete class 1:3:6 for anchoring the posts  Supply and fix 15-gauge galvanized wire spaced at 450mm 5 strands  Supply and fix 12.5-gauge Chain link (2.4m height) and provide for anchoring to the ground as shall be directed by supervising Engineer.  Concrete class 1:3:6 for anchoring the chain-link (100*150mm)  Fabricate and install 5m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 100 x 100mmx 3mm SHS posts; 50mm x 50mmx 1.5mm main frames; 30 X 30 X 1.5mm SHS Intermediate frames at 150mm centers Rectangular Hollow Section Main posts to be cast in 300 300 x 45mm mass concrete foundation, all including associated ironmongeries, and locking system all to the	Fence repair (35m by 35m)  Provide and install 100mm X 100mm by 2.70m long Concrete posts spaced at 3.0 m intervals (140M).  Provide Corner support Concrete poles and anchor poles spacing at interval of 10m (100mm x 100mm by 1.8m)  Excavation of holes to anchor posts (300mmx300mmx600mm)  Concrete class 1:3:6 for anchoring the posts  M³  Supply and fix 15-gauge galvanized wire spaced at 450mm 5 strands  Supply and fix 12.5-gauge Chain link (2.4m height) and provide for anchoring to the ground as shall be directed by supervising Engineer.  Concrete class 1:3:6 for anchoring the chainlink (100*150mm)  Fabricate and install 5m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 100 x 100mmx 3mm SHS posts; 50mm x 50mmx 1.5mm main frames; 30 X 30 X 1.5mm SHS Intermediate frames at 150mm centers Rectangular Hollow Section Main posts to be cast in 300 300 x 45mm mass concrete foundation, all including associated ironmongeries, and locking system all to the	Fence repair (35m by 35m)  Provide and install 100mm X 100mm by 2.70m long Concrete posts spaced at 3.0 m intervals (140M).  Provide Corner support Concrete poles and anchor poles spacing at interval of 10m (100mm x 100mm by 1.8m)  Excavation of holes to anchor posts (300mmx300mmx600mm)  Concrete class 1:3:6 for anchoring the posts  M  Supply and fix 15-gauge galvanized wire spaced at 450mm 5 strands  Supply and fix 12.5-gauge Chain link (2.4m height) and provide for anchoring to the ground as shall be directed by supervising Engineer.  Concrete class 1:3:6 for anchoring the chainlink (100*150mm)  Fabricate and install 5m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 100 x 100mmx 3mm SHS posts; 50mm x 50mmx 1.5mm main frames; 30 X 30 X 1.5mm SHS Intermediate frames at 150mm centers Rectangular Hollow Section Main posts to be cast in 300 300 x 45mm mass concrete foundation, all including associated ironmongeries, and locking system all to the	Fence repair (35m by 35m)  Provide and install 100mm X 100mm by 2.70m long Concrete posts spaced at 3.0 m intervals (140M).  Provide Corner support Concrete poles and anchor poles spacing at interval of 10m (100mm x 100mm by 1.8m)  Excavation of holes to anchor posts (300mmx300mmx600mm)  Concrete class 1:3:6 for anchoring the posts  Supply and fix 15-gauge galvanized wire spaced at 450mm 5 strands  Supply and fix 12.5-gauge Chain link (2.4m height) and provide for anchoring to the ground as shall be directed by supervising Engineer.  Concrete class 1:3:6 for anchoring the chain-link (100*150mm)  Fabricate and install 5m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 100 x 100mmx 3mm SHS posts; 50mm x 50mmx 1.5mm main frames; 30 X 30 X 1.5mm SHS Intermediate frames at 150mm centers Rectangular Hollow Section Main posts to be cast in 300 300 x 45mm mass concrete foundation, all including associated ironmongeries, and locking system all to the		

Bill No 9	PUMP AND SOLAR SYSTEM INST	1	1		·
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
9.1	Submersible Premium Pump being multistage centrifugal impeller design and fitted with 10.2 Kw 15Ph motor. (Yield- 22-30m3/Hr., Total Dynamic Head- 120m	No	1		
9.2	Control Unit; the controller Sunverters for controlling of the pump system, monitoring of the operating states and incorporates the following alarm functions: over current, under voltage, over speed, over temperature, reverse polarity, low water. It should have an integrated MPPT (Maximum Power Point Tracking) which maximizes power use from PV modules. (10.2KW 7.65PH SUNVERTER)	No	1		
9.3	Solar Panels 10 No. 200 W, 24V, crystalline PV solar modules	No	10		
9.4	Accessories will include underground cables and inter-panel wiring among others. Installation To include: I. Transport of equipment to the site, ii. Electrical connections between pump and controller, iii able Connections between pump, controller and the solar modules, iv. Commissioning and testing with water delivered to the surface.				
9.5	4mm2 x 4 PVC flat submersible Cable	m	130		
9.6	4mm x 4 Core U/G Cable	m	130		
9.7	Sensus Water Meter	No.	1		
9.8	Lightning Arrestor System	LS	1		
9.9	Galvanized steel ground mount 4m at the lowest end structure	No.	1		
9.10	Twin flat 6mm Cable with Earth	No.	25		
9.11	Earth rod c/w clamp and 10m copper earth wire  SUB-TOTAL CARRIED FORWARD TO N	Ls EXT PA	1 <b>GE</b>		

	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE					
9.12	PV Surge protect	No.	1			
9.13	Draw pipes uPVC,2.5" diameter including cooling sleeve, 1 adaptor set, fittings, adhesives and sealants	M	10			
9.14	Additional installation Sundries and Fittings (Provisional)	LS	1			
9.15	Solar security light (50W LED light, 120W Solar Module, 150Ah Sealed maintenance free battery, Dawn-to dusk controller, 6m high pole c/w battery box	Numb er	4			
9.16	63A manual change over switch	Pcs	1			
9.17	Non return valve 2" (flap type)	Pcs	1			
9.18	pipes, 2.5" Dia Upvc borehole pipes 3m Dayliff or equivalent	Pcs	4			
9.19	Inline chlorine dozer to include all fittings with an operating flow (m3/hr.) range 1-15m3/hr. and pressure bar between 0.15-8. Grund for DDE6-10	LS	1			
9.20	200W mono crystalline module, 12 volts 100Ah maintenance free deep cycle battery and 600W victrons inverter to run the inline chlorination dozer c/w accessories.	Unit	1			
	BILL NO 9: SUB-TOTAL PUMP INSTAL	LATION				

ill No: 10	6M HIGH STEEL TOWE	R FOR 1	10M <sup>3</sup> PL	ASTIC TAN	NKS
item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
10.1	Excavate in normal for the concrete footings size 0.8m*0.8m*1.5m of the tower column	m³	3.84		
10.2	Extra over excavation in rock (provisional)	m³	0.384		
10.3	Carry away for disposal surplus excavated materials, dispose or spread as instructed by engineer.	m³	1.5		
10.4	50mm thick blinding Class 15	m³	0.192		
10.5	Supply all materials, deliver to site, mix and vibrate reinforced concrete class 25 for column footings of size 0.8m*0.8m*1.5m.	m³	3.84		
10.6	Supply all materials deliver to site and erect 6m high steel tower complete with platform walkway and cage ladder capable of supporting a 10m³ plastic tank. Rate to include sand blasting the metal surface and applying 3 coat aluminum paint. (Contractor to provide shop drawing for the platform)	Ls	1		
10.7	Plumbing Works				
10.71	Supply all materials; joint including all jointing materials all pipe work in to and out of the tank to ground level (G.I Pipes 50mm Dia Class B,) Rater include anchorage of the pipe work.	LS	1		
10.72	Supply, deliver to site and place 1No plastic tanks (10m³) to the tower. Rate to include lifting the tanks.	No	1		
10.8	Painting				
10.81	Supply and apply two coats of silver aluminium paint to the tower and cage of the tank.	LS	1		
10.82	Supply and apply recommended disinfectant and test the tank.	LS	1		
10.83	Allow for Testing and Commissioning of tank	LS	1	E CM	
	BILL NO 10: SUBTOTAL FOR CONS HEIGHT TOWER CARRIED TO SUI			d OM	

# COST OF REHABILITATION OF OLTUROT WATER SUPPLY PROJECT

BILL NOS	DESCRIPTION	TOTAL (KSHS)
1	PRELIMINARIES	
2	PIPELINE REPAIR AND EXTENSION	
3	CONSTRUCTION OF VALVES CHAMBERS	
4	REHABILITATION OF MASONRY TANK	
5	12M HIGH ELEVATED PRESSED STEEL TANK CONSTRUCTION (100M³)	
6	2 NO CONSTRUCTION OF WATER KIOSK	
7	2 NO CONSTRUCTION CATTLE TROUGH	
8	REPAIR WORKS (SOLAR AND FENCE)	
9	PUMP INSTALLATION	
10	CONSTRUCTION OF 6M HIGH ELEVATED STEEL TOWER	
	TOTAL COST FOR REHABILITATION OF OLTUROT WATER SUPPLY PROJECT	

# C. BILL OF QUANTITIES OF REHABILITATION OF NGOROROI WATER SUPPLY PROJECT

Bill No 1:	PRELIMINARIES							
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)			
	Project Branding				-			
	Provide, install and maintain for the entire							
	contract period a contract signboard on 2m x							
	1m metal sheet appropriately secured on a							
	19mm steel frame at least 1.5m above the							
	ground level to the satisfaction of the							
1.1	Engineer or his appointed representative.	No	1					
1.2	Allow for Pressure Testing and Disinfection	Item	1					
	BILL NO 1: SUB TOTAL PRELIMINAR	IES						

Bill No	PIPELINE EXTENSION: INTAKE PIPELI	NE A	ND LIVE	ESTOCK PI	PELINE
2:	REPAIR				
				Rate	Total
Item	Description	Unit	Qty	(Kshs)	(Kshs)
2.1	Intake Pipeline extension from Proposed Int	ake to	Old inta	ke	
	Installation and provide mean of Pipes Dia				
	65mm G.I Class B anchorage against the wall				
	of cliff. Each pipe anchored by 3No supports				
	by hilting of holes along the cliff wall				
2.11	(Drawing attached)	m	255		
	Allow transportation of G.I Pipes with use				
	human labour at distance of 9km with				
2.12	elevation of 400m	No	85		
	Allow transportation of Pipes fitting and				
2.13	other construction materials	LS	1		
	Supply and Install G.I Dia 65 mm Class B				
2.14	Pipe including fittings.	m	510		
	Supply and Install G.I Dia 40mm Inches				
2.15	Class B Pipe including fittings.	m	60		
	Supply and install fittings as per				
	specification				
	Allow installation of Dia 65mm Gate valves				
	with its fittings	Item	1		
	Allow installation of Dia 65mm Pressure				
2.16	Reducing valve	Item	1		
	install Air Release Valve Double Orife 40mm				
2.17	along Rising main	No	3		
	SUBTOTAL INTAKE PIPELINE				

Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
2.2.1	Supply and Install G.I Dia 40mm Inches Class B Pipe from Masonry tanks to Livestock trough	m	60	(INDIES)	(113113)
	Supply and install fittings as per specification				
2.2.2	G.I 40mm Socket	No	5		
2.2.3	G.I 40MM Gate valve (Peglar)	No	5		
2.2.4	G.I 40mm Socket	No	5		
2.2.4	Dia Union G.I 50mm	No	3		
2.2.5	Dia Socket G.I 50mm	No	10		
2.2.6	Dia Nipple G.I 50mm	No	10		
2.2.7	G.I 40MM union	No	5		
2.2.8	G.I 40mm Socket	No	5		
2.2.9	G.I 40mm Gate valve (Peglar)	No	5		
2.3	2 NO REPAIR OF COMMUNITY WATE	ER PO	INT AT	NGORORO	I CENTR
2.3.1	G.I 3" x 4mm Reducer bush	No	1		
2.3.2	G.I 40mm Tee	No	1		
2.3.3	G.I 32mm Union	No	8		
2.3.4	G.I 32mm Gate Valve (Peglar)	No	4		
2.3.5	G.I 32mm nipple	No	5		
2.3.6	G.1 18mm Gate Valve (Peglar)	No	4		
2.3.7	G.1 18mm Union	No	3		
2.3.8	G.1 18mm Socket	No	4		
2.3.9	G.1 18mm Nipple	No	4		
2.3.10	G.1 18mm Elbow	No	2		
2.3.11	G.I 25mm Gate Valve	No	2		
2.3.12	G.I 32mm Nipple	No	2		
2.3.13	G.I 32mm Union	No	1		
2.3.14	G.I 32mm Water tap	No	2		
2.3.15	G.I 32mm Socket	No	3		
	Sub Total Pipeline Rehabilitation and Comm	unity `	Yard tai	p repair	

				Rate	Total
Item	Description	Unit	Qty	(Kshs)	(Kshs)
	Excavate and backfill for HDPE Dia 63mm				
2.4.1	pipe; to Ljata villages	m³	720		
	Provide, Lay and Joint by HDPE Coupling in				
	the trench making provisions for appurtenance				
	and 63 mm Dia HDPE pipe PN10 rate to				
	include necessary fittings as per specification				
2.4.2	and test	m	1,800		
	Installation of 63 mm Air Release valve and				
2.4.3	Fitting at Chainage 1680m	LS	1		
	Construction Anchor blocks as per technical				
2.4.4	drawing	No	10		
	Allow construction of Pipeline Marker post,				
2.4.5	ARV and valves	No	10		
2.4.6	Allow for Pressure Testing and Disinfection	Item	1		
	<b>Construction of Ground Plastic tank</b>				
	Platform for an existing 10,000l UPVC				
2.5	tank.				
	Construct plastic tank (10m³) Concrete				
	platform base raised 0.4m from ground level.				
2.5.1	Foundation depth 0.4m, Dia =2.4m, Rate	2			
2.5.1	inclusive of foundation excavation	m³	4		
252	Allow for connecting water from Plastic tank		1		
2.5.2	to an Existing water Point	item	1		
	Sub Total Ljata Pipeline				
2.6	NGOROROI CENTRE PIPELINE EXTENS	SION			
	Excavate and backfill for HDPE Dia 50mm				
2.6.1	pipe; to community tank	m³	340		
	Provide, Lay and Joint by HDPE coupling in				
	the trench making provisions for appurtenance				
	and 50 mm Dia HDPE pipe PN10 rate to				
	include all necessary fittings as per				
2.6.2	specification and test	m	850		
	Construction Anchor blocks as per technical				
2.6.3	drawing	No	7		
	Allow construction of Pipeline Marker post,				
2.6.4	ARV and valves	No	8		
	T Company of the Comp				ı

2.7	CONSTRUCTION OF VALVE CHAMBERS FOR LJATA AND NGOR EXTENSION PIPELINE						
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)		
	Excavations						
	Excavate for 1000 x 1000 x 1000 mm deep						
	outlet valve chamber including maintaining						
	sides and keeping bottoms free from water,						
	mud and fallen materials, grading bottoms,						
2.7.1	and carting away surplus excavated material	$m^3$	1				
	Blinding 50mm thick; Class 15 Concrete						
	(1:3:6) in foundations as applies to:						
	Valve Chamber foundation (1m x1m wide by						
2.7.2	.3 m long)	m³	0.3				
	Concrete						
	Vibrated reinforced insitu concrete class						
	25/20; with minimum cube crushing strength						
	of 25N/mm <sup>2</sup> at 28 days as specified; including						
	formwork and reinforcement						
2.7.3	To floor slab	$m^3$	0.45				
2.7.4	To roof slab	$m^3$	0.2				
	Blockwork						
	200 mm thick natural stone walling to						
2.7.5	chamber	$m^2$	4				
	Plaster; 25mm with cement, Water proofing						
2.7.6	and sand mortar 1.1:3 mix internally.	$m^2$	4				
	Cover						
	Medium duty air-tight single seal flat type						
	lockable inspection cover and frame to BS 497						
	Table 6 Grade 0 and bedding frame in cement						
	mortar and setting cover in grease to opening						
2.7.7	size 600 x 450mm	nr	1				
	Total for 1 Valve chamber						
	Sub Total for 3 No. Valve chambers						
	BILL NO 2: SUB- TOTAL PIPELINE EXTE	ENSIO	N A ND	REPAIR			

Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
	Transport of Construction of Materials and Generals				
3.1	Transport Construction material by use of human labour at distance of 9km with elevation of 400m	LS	1		
	Temporary Works				
3.11	Provide for temporary diversion of spring water during construction works as directed by the engineer. Rate to include sealing off the diversions after construction works are complete.	LS	1		
	Site Clearance				
3.12	General site clearance around the spring area. Works to include clearing of rock debris around the site area as directed by the engineer.	SM	100		
3.13	Demolish existing spring box and connect existing pipeline to proposed pipeline, transport and deposit debri to fill as directed by the infrastructure specialist	LS	1		
	Earthworks				
	Include mechanical excavations up to the finished ground levels as indicated in the drawings. The rates entered against the items in this section shall include for stripping top soil, laying aside and subsequently replacing over the exposed eye, excavation in trench/drain in material other than rock, shuttering where necessary, refilling and compacting spreading surplus soil evenly over and alongside spring, compacting and level. Depths are stated from ground level to invert level.				

	SUB-TOTAL CARRIED FORWARD FROM	PREV	IOUS PAGE	
3.2	Pack the filtration gallery of eye with hard core			
	Hardcore filling			
	Hand packed hardcore in depths n.e. 1m as applies to:			
3.2.1	Weir	m²	3	
3.2.2	Apron	m²	4	
3.2.3	Wash bay	m²	2	
3.2.4	DPM 500mm gauge	m²	9	
3.3	Reinforcement			
	High yield deformed steel bar reinforcement to BS 4461			
3.3.1	10 mm diameter bars	Kg	85	
3.3.2	8 mm diameter bars	Kg	41.7	
3.4	Concrete Works			
	Note: All designed mix and structural concrete to BS 5328, provide, place, vibrate and cure concrete in the following elements of the structure as directed by the Engineer.  Blinding 50mm thick; Class 15 Concrete (1:3:6)			
	in foundations as applies to:			
3.4.1	Weir and Spring Apron (0.8m Base width x1.5m height by 1m Base length)	m³	0.735	
3.4.2	Wash bay (1m wide by 1m long)	m³	1	
	Reinforced concrete 150mm thick; Class 25 Concrete (1:2:4) as applies to:			
3.4.3	Weir and Spring Apron (0.8m Base width x1.5m height by 1m Base length)	m³	1	
3.4.4	Wash bay (1m wide by 1 long)	m³	1.2	
	SUB-TOTAL CARRIED FORWARD TO NE	XT PA	GE	

	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE					
3.5	Concrete Finishes					
	Formwork: Fair Finish					
3.5.1	Provide sawn timber formwork to the edges of the apron and mass concrete access slab	m²	4			
3.5.2	Ditto edges of the access staircase, wash bay & masonry plaque	m	4			
3.6	Finishes					
	Provide all materials, handle, mix and apply 1:3 cement sand mortar.					
3.6.1	Water proofed screed to the apron floor. Allow for 1:25 fall towards the drain, to the end of the stone pitching	m²	3			
3.6.2	Water proofed screed to the access pathway. Allow for 1:25 fall towards the edges	m²	10			
3.6.3	Water proofed screed to the wash bay soffice and edges. Allow for 1:25 fall towards the sump	m²	2			
3.6.4	Water proofed rendering to the internal and external soffices of the wing walls	m²	17			
3.6.5	Extra over creating rough texture on the apron floor slab, access staircase and access footpath	Ls	1			
3.7	Spring Box and Cover					
	Hardcore filling					
	Hand packed hardcore in depths n.e. 1.0 m as applies to:					
	Spring Box	m²	4			

	SUB-TOTAL CARRIED FORWARD FROM PREV	<b>JOU</b>	S PAG	E	
3.8	Concrete Works (Spring Box) (2m x 2m x 1m High)				
	Note: All designed mix and structural concrete to BS 5328, provide, place, vibrate and cure concrete in the following elements of the structure as directed by the Engineer.				
	Blinding 50mm thick; Class 15 Concrete (1:3:6) in foundations as applies to:				
3.8.1	Spring box foundation (2m x2m wide by .3 m long) Reinforced concrete 150mm thick; Class 25 Concrete (1:2:4) as applies to:	m³	1		
3.8.2	Spring box base (2.0 m x2.0 m wide by .3 m long)	m³	1		
3.9	Walling of Spring				
3.9.1	Use Hard stone boulder to make walling of 300mm thickness. Using Mortar Ratio 2: 1: 1 (Sand: Cement: Water proof cement)	m³	2.0		
3.10	Formwork: Fair Finish				
3.10.1	Provide sawn timber formwork to the edges of the Spring box access slab	m	7		
3.11	Finishes				
	Provide all materials, handle, mix and apply 1:3 cement sand mortar.				
	Water proofed screed to the apron floor. Allow for 1:25 fall towards the drain, to the end of the stone				
3.11.1	pitching	m²	2		
2 11 2	Water proofed Spring box internal and external soffices of Walling and base. Allow for 1:25 fall	2	15.0		
3.11.2	towards the sump  SUB-TOTAL CARRIED FORWARD TO NEXT PA	m <sup>2</sup>	15.0		

	SUB-TOTAL CARRIED FORWARD FROM PREVIO	IIS PA	GE	
3.12	Reinforcement			
	Provide, handle, cut, bend and fix the following reinforcement bars to BS4449 as per the bar bending schedule			
3.12.1	BRC A142, Mesh reinforcement	m²	4	
3.13	Water Drawoff, Scour and Overflow			
	Provide all materials, hack, install and make good after; the water draws off system for the spring box as per the drawings. The pipes should be 50mm GI with length not less than 2m. Rate to include internally lining the pipe with plastic tube as applies to:			
3.13.1	DN 90mm (0.5m) Double flanged spigot Overflow pipe	nr	1	
3.13.2	DN 90mm Blank flange	No	1	
3.13.3	DN 90mm (2m) Double Flanged Spigot G.I Pipes)	Ls	1	
3.13.4	DN 90mm x 65mm tampered Spigot	Ls	1	
3.13.5	Washout Dia 50mm G.1 pipe complete with plug 1000mm Dia 110mm 0.5m Double Flanged spigot pipe to connect		1	
3.13.6	from weir to Spring box	No	2	
3.13.7	DN 110mm Blank Flanged	No	2	
3.13.8	DN 65mm 0.5 Double flanged for Weir	No	1	
	SUB-TOTAL CARRIED FORWARD TO NEXT PAGE	<u> </u>		

14	Spring Box and Cover				-
.14.1	Provide all materials and precast the spring box cover slab 1200mm by 1200mm. Allow for formation of a 100mmx100mmx60mm manhole, lined internally with 3/4-inch angle line as shown on the drawings	Ls	1		
14.2	Ensure the constructed spring box are free from Rock debris and rotten wooden during rainy season by proper protection	Ls	1		
.15	Fencing			<u> </u>	
	Fencing Supply materials and construct 1.8m high above Ground level Chain Link fence around the water pan comprising of; (20m)				
.15.1	Provide and install 100mm x 100mm by 2.70m long Concrete poles spaced at 3.0 m intervals	No	12		
.15.2	Provide Corner support Concrete poles and anchor poles at interval of 10m (100mm x 100mm by 1.8m)	No	8		
.15.3	Excavation of holes to anchor posts (100mmx100mmx600mm)	No	20		
.15.4	Concrete class 1:3:6 for anchoring the posts	m³	0.36		
.15.5	Supply and fix 12.5-gauge galvanized wire spaced at 450mm	M	60		
.15.6	Supply and fix 12.5-gauge Chain link (6ft height) and provide for anchoring to the ground as shall be directed by supervising Engineer.	Lm	48		
.15.7	Fabricate and install 2m wide x 1.8m high steel grill gate in 2 equal leaves; Comprising of 32 x 32 mmx 3mm SHS posts; 25mm x 25mmx 1.5mm main frames; 19x 19 x 1.5mm SHS Intermediate frames at 100 mm centers Rectangular Hollow Section Main posts to be cast in 50 x 50 x 6mm mass concrete foundation, all including associated ironmongeries, and locking system all to the Engineers satisfaction		1	20,000	20,000

Bill No 4	REHABILITATION AND 1	REPAIF	R WOR	RKS	
Item	Description	Unit	Qty	Rate (Kshs)	Total (Kshs)
4.1	REPAIR OF MASONRY TA	NKS (2	NO 10	0M³)	
4.1.1	Vibrated reinforced insitu concrete class 25/20; with minimum cube crushing strength of 25N/mm² at 28 days as specified; in  Concreting of Tank Ring base at 600 wide at 300mm thickness	M <sup>3</sup>	4.5	17,500	78,750
	Internally				
4.1.2	masonry wall	m²	60	250.00	15,000.
	Waterproofing plaster to surfaces of concrete/Masonry wall applied by an approved and experienced persons (Cement to sand ratio 1:2) with cement screed finish.				
4.1.3	25mm Floor	m²	40	500.00	20,000.
4.1.4	25mm Wall	m²	60	500.00	30,000.
4.1.5	Provide chicken mesh on the internal wall for plaster reinforcement (0.5")	m²	60	150.00	9,000.
4.1.6	Trowel Finish floor-Wall intersection and apply 20mm x20mm bondex sealant to stop leakages	m	21	100.00	2,100.
4.1.7	Externally				
4.1.8	Tank skirting repair  Medium duty air-tight single seal flat type lockable inspection cover and frame to BS 497 Table 6  Grade 0 and bedding frame in cement mortar and	m²	20	550.00	11,000.
4.1.9	setting cover in grease to opening size 600 x 450mm	No	1	8,500.00	8,500.
4.1.10	Replacement of water tank vents	No	3	3,500.00	10,500.
4.1.11	Extra over for finishing by external plastering (5mm thickness)	m²	72	1,200	86,400
4.1.12	Apply 2 layers of Collar bituminous internal wall surface at least 1mm thickness	m²	60	1,000	60,000
	Sub Total Repair Tanks (2No)				331,250

4.2	REPAIR OF 2 NO MASON	RY TA	NKS (50	M <sup>3</sup> )	
	Internally				
4.2.1	Hack Floor and the masonry wall	m²	61	250.00	15,250.
	Waterproofing plaster to surfaces of concrete/Masonry wall applied by an approved and experienced persons (Cement to sand ratio 1:2) with cement screed finish.	l			-
4.2.2	25mm Floor	m²	20	500.00	10,000.
4.2.3	25mm Wall	m²	41	500.00	20,500.
4.2.4	Provide chicken mesh on the internal wall for plaster reinforcement (0.5")	m²	41	150.00	6,150
4.2.5	Trowel Finish floor-Wall intersection and apply 20mm x20mm bondex sealant to stop leakages	m	16	100.00	1,600
4.2.6	Externally				
4.2.7	Tank skirting repair	m²	12	550.00	6,600
4.2.8	Medium duty air-tight single seal flat type lockable inspection cover and frame to BS 497 Table 6 Grade 0 and bedding frame in cement mortar and setting cover in grease to opening size 600 x 450mm	No	1	8,500.00	8,500
4.2.9	Replacement of water tank vents	No	3	3,500.00	10,500
	Total for 1 tank				79,100
	SUB TOTAL REPAIR TAN	K (3,4	)		158,200

4.3	REPAIR OF IRRIGATION MAS	SONR	YTANI	<u>X (100M³)</u>	
	Masonry Tank Repair 100m <sup>3</sup>				
	Internally				
4.3.1	Hack Floor and the masonry wall	m²	100		
	Waterproofing plaster to surfaces of concrete/Masonry wall applied by an approved and experienced persons (Cement to sand ratio 1:2) with cement screed finish.				
4.3.2	25mm Floor	m²	40		
4.3.3	25mm Wall	m²	60		
4.3.4	Provide chicken mesh on the internal wall for plaster reinforcement (0.5")	m²	60		
4.3.5	Trowel Finish floor-Wall intersection and apply 20mm x20mm bondex sealant to stop leakages	m	21		
4.3.6	Externally				
4.3.7	Tank skirting repair  Medium duty air-tight single seal flat type lockable inspection cover and frame to BS 497 Table 6	m²	20		
4.3.8	Grade 0 and bedding frame in cement mortar and setting cover in grease to opening size 600 x 450mm	No	1		
4.3.9	Replacement of water tank vents	No	3		
	SUB TOTAL REPAIR OF IRRIGATION TANK				
	SUB TOTAL FOR MASONRY 5No TANK REP.	AIR			

4.4	REPAIR AND CONSTRUCTION OF NEW VAL	VE C	HAMBER	R (8NO)	
	Excavations				
	Excavations				
4.4.1	Excavate for 1000 x 1000 x 1000 mm deep outlet valve chamber including maintaining sides and keeping bottoms free from water, mud and fallen materials, grading bottoms, and carting away surplus excavated material	$m^3$	1		
	Blinding 50mm thick; Class 15 Concrete (1:3:6) in foundations as applies to:				
4.4.2	Valve Chamber foundation (1m x1m wide by .3 m long)  Concrete	m³	0.3		
	Vibrated reinforced insitu concrete class 25/20; with minimum cube crushing strength of 25N/mm² at 28 days as specified; including formwork and reinforcement				
4.4.3	To floor slab	$m^3$	0.45		
1.4.4	To roof slab	$m^3$	0.2		
4.4.5	Blockwork				
4.4.6	200 mm thick natural stone walling to chamber	$m^2$	4		
4.4.7	Plaster; 25mm with cement, Water proofing and sand mortar 1.1:3 mix internally.	$m^2$	4		
4.4.8	Cover				
4.4.9	Medium duty air-tight single seal flat type lockable inspection cover and frame to BS 497 Table 6 Grade 0 and bedding frame in cement mortar and setting cover in grease to opening size 600 x 450mm	nr	1		
	Total for 1 Valve chamber				
	SUB TOTAL FOR 8 NO. VALVE CHAMBERS				

4.5	REPAIR OF CATTLE AND SHEEP TROUGH (	2NO)			
4.51	Hack the Cattle and Sheep trough	$m^2$	54		
4.52	Plaster; 25mm with cement, Water proofing and sand mortar 1.1:3 mix internally and floor height 1.6m	$m^2$	27		
4.51	Provide for stone pitching protection to cattle ramp 15m wide 25m long and 300m m thickness with natural hard stones material as shall be directed by engineer.	$m^2$	80		
	Supply and install fitting as per specification				
4.52	40MM G.I Tee	No	3		
4.53	40mm G.I Union	No	2		
4.54	40mm G.I Socket	No	3		
4.55	40mm Nipple	No	3		
4.56	40 mm Gate Valve	No	3		
	SUB TOTAL FOR CATTLE AND SHEEP TROU	GH R	EPAIR		
	BILL NO 4: TOTAL REPAIR MASONRY TANK LIVESTOCK TROUGH WORKS CARRIED TO	,		MBERS,	

# COST FOR REHABILITATION OF NGOROROI WATER SUPPLY

	SUMMARY COST OF NGOROROI REHABILITATION PROJECT	
BILL		COST
NOS	DESCRIPTION	(KSHS)
1	PRELIMINARIES	
	PIPELINE EXTENSION (INTAKE PIPELINE, LJATA AND NGOROROI CENTRE	
2	PIPELINE)	
3	SPRING BOX INTAKE CONSTRUCTION	
	REPAIR WORKS (5 NO MASONRY TANKS, VALVES CHAMBERS AND	
4	LIVESTOCK TROUGH	
	TOTAL COST FOR REHABILITATION OF NGOROROI WATER	
	SUPPLY	

# TABLE – BILL OF QUANTITIES FOR VIP LATRINES

#### **SUMMARY**

	SUMIMAKI	
ITEM	DESCRIPTION	AMOUNT (KSHS)
Bill No.1	CONSTRUCTION OF 1Nr 3-DOOR VIP LATRINES FOR GIRLS IN GURAMA PRIMARY SCHOOL, LAISAMIS SUB COUNTY, MARSABIT.	
Bill No.2	CONSTRUCTION OF 1Nr 3-DOOR VIP LATRINES FOR BOYS IN GURAMA PRIMARY SCHOOL, LAISAMIS SUB COUNTY, MARSABIT.	
GRAND TO	OTAL CARIED TO FORM OF TENDER	

### A. GIRLS LATRINE

С	ONSTRUCTION OF 1NO. (3-DOOR) VIP LATRIN SCHOOL, LAISAMIS SUB COUNTY				PRIMARY
Item	Description	Unit	Quantity	Unit Rate	Amount (Kshs)
	Element No.1: Excavation & Earth Works				

l A		2 1	40.00		
	General excavation to remove top soil to an average depth of 150mm	m <sup>2</sup>	19.00		
В	Bulk excavation for latrine pit approximately (3.2* 1.2) between 0.15-3m depth	$m^3$	11.00		
С	Ditto but between 3-6m depth	$m^3$	12.00		
D	Ditto but for hard rock excavation (Provisional)	$m^3$	1.00		
Е	Excavation for wall footing, 600mm wide by 1000mm deep under all walls	m <sup>3</sup>	4.50		
F	Bulk excavation for a soak pit 1.5m in diameter approximately 2.5m deep for waste water from hand washing	m <sup>3</sup>	5.00		
G	Back fill around masonry foundation footing with selected granular material well rammed in layers not exceeding 150mm thick	$\mathrm{m}^3$	3.50		
Н	Cart away surplus excavated material & deposit at recommended area	m <sup>3</sup>	29.00		
I	300mm Approved hard-core, well compacted and blinded using 50mm Murram/quarry dust	m <sup>3</sup>	3.00		
	Carried to Collection				
	Element No.2: Masonry Work				
	Substructure				
A	225mmX225mmX400mm natural cut stone external and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course	m <sup>2</sup>	15.50		
	Superstructure				
	_				
A	150mmX225mmX400mm natural cut stone external and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course	m <sup>2</sup>	36.00		
В	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all	m <sup>2</sup>	36.00		
	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course				
	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls				
	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection	m m <sup>3</sup>			
В	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide	m	18.50		
B	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.	m m <sup>3</sup>	18.50		
B A B	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm	m m <sup>3</sup>	1.00		
B A B C	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm wide by mm passage area  225mm X 150mm Concrete Grade 25 (1:2:4) in ring	m m <sup>3</sup> m <sup>3</sup> m <sup>3</sup>	1.00 1.40 0.50		
B A B C	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm wide by mm passage area  225mm X 150mm Concrete Grade 25 (1:2:4) in ring beam/lintel  75mm Concrete Grade 15 (1:3:6) fort disabled person access ramp, sloping at 1:7  300mm wide 100mm thick mass concrete paved walkway around the latrine	m m <sup>3</sup> m <sup>3</sup> m <sup>3</sup> m <sup>3</sup>	1.00 1.40 0.50 0.50		
B A B C D	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm wide by mm passage area  225mm X 150mm Concrete Grade 25 (1:2:4) in ring beam/lintel  75mm Concrete Grade 15 (1:3:6) fort disabled person access ramp, sloping at 1:7  300mm wide 100mm thick mass concrete paved walkway around the latrine  Carried to Collection	m m³ m³ m³ m³ m³	1.00 1.40 0.50 0.50		
B A B C D	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm wide by mm passage area  225mm X 150mm Concrete Grade 25 (1:2:4) in ring beam/lintel  75mm Concrete Grade 15 (1:3:6) fort disabled person access ramp, sloping at 1:7  300mm wide 100mm thick mass concrete paved walkway around the latrine  Carried to Collection  Element No. 4: Concrete Ancillaries	m m³ m³ m³ m³ m³	1.00 1.40 0.50 0.50		
B A B C D	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm wide by mm passage area  225mm X 150mm Concrete Grade 25 (1:2:4) in ring beam/lintel  75mm Concrete Grade 15 (1:3:6) fort disabled person access ramp, sloping at 1:7  300mm wide 100mm thick mass concrete paved walkway around the latrine  Carried to Collection  Element No. 4: Concrete Ancillaries  Formwork	m m³ m³ m³ m³ m³	1.00 1.40 0.50 0.50		
B A B C D	and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course  10mm wide DPM to walls  Carried to Collection  Element No.3: Concrete Work  200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.  100mm concrete class 25 (1:2:4) in latrine slab  100mm THK concrete class 15 (1:3:6) in 1800mm wide by mm passage area  225mm X 150mm Concrete Grade 25 (1:2:4) in ring beam/lintel  75mm Concrete Grade 15 (1:3:6) fort disabled person access ramp, sloping at 1:7  300mm wide 100mm thick mass concrete paved walkway around the latrine  Carried to Collection  Element No. 4: Concrete Ancillaries	m m³ m³ m³ m³ m³	1.00 1.40 0.50 0.50		

В	edges ground slab 150mm wide	m	13.50	
С	Side of ring beam 250mm deep	$m^2$	6.00	
D	support props and floor slab	Item	1.00	
	Reinforcement	100111		
	Steel reinforcement cut, bend & placed in position, unit price to include cutting, bending & placing in position with binding wire and concrete seats			
	Foundation Footing			
A	8mm diameter mild steel (0.40kg/m) in foundation footing	Kgs	18.00	
В	10mm diameter high tensile steel (0.616kg/m) in foundation footing	Kgs	23.00	
С	10mm diameter high tensile steel (0.616kg/m) in pit slab	Kgs	55.00	
Е	10mm diameter high tensile steel (0.616kg/m) in ring beam	Kgs	30.00	
F	8mm diameter mild steel (0.40kg/m) in ring beam	Kgs	20.00	
	Carried to Collection			-
	Element No.5: Roofing	2	45.0-	
A	Corrugated sheets and BP760 Boxed profiled sheets (Effective 762 mm wide) Nailed to 50 X50 mm purlins.	m <sup>2</sup>	13.00	
	Timber Work			
	All structure truss members shall be in seasoned cypress wood, painted two coats of anti-termite solution, and shall be tight fixed with top tie beam with 6mm diameter plain bar.			
A	a) 100 X 50mm wall plate	m	13.00	
В	b) 50X 75mm timber to rafter and tie beam	m	12.00	
С	c) 75 X 50mm vertical member	m	5.00	
D	e) 50x50mm roof purlin	m	20.00	
Е	200mmx 25mm Pre-painted Facia Board	m	16.00	
	Vent Pipe			
A	provide a PVC vent pipe 110 mm diameter complete with fly screen to 200mm above the roof pitch	No	3.00	
	Carried to Collection			
	Element No.6: Fixtures and Fittings			
	Doors			
	Provide and install the following purpose made doors complete with fittings and locks			
A	Metal frames with metallic shutter door 900 X 2100mm to normal latrine	No	2.00	
В	Metal frames with Metallic shutter door 1150 X 2100mm to disabled persons latrine swinging either sides	No.	1.00	
С	Prepare and apply one primer coat to metal surfaces	$m^2$	7.00	
D	Prepare and apply one primer coat to metal surfaces and two finishing coats first grade oil paint	m <sup>2</sup>	7.00	
	Carried to Collection			
	Element No.7: Finishes			
	Wall			

A	Apply plaster to all Internal and External wall surfaces with cement sand mortar 1:2	m <sup>2</sup>	70.00	
С	Apply First grade plastic emulsion paint to all plastered wall faces	m <sup>2</sup>	64.00	
D	Provide 3 coats of bituminous paint to 0.6m from the ground.	m <sup>2</sup>	6.00	
	Floor			
A	32 mm thick trowelled hard and smooth finished -with red oxide	m <sup>2</sup>	12.00	
В	Allow for forming of pit hole and construction of foot rest to details for normal toilets	No	2.00	
С	Supply materials and install for disabled persons sato stool toilet and support rails as per Architectural drawings (to include in the disabled latrine and the access ramp)	Item	1.00	
	Carried to Collection			
	Element No.8: Drainage and Water Supply			
A	Provide a screed waterproof finish concrete hand washing basin complete with all fittings, details as shown on the drawing.	No	1.00	
В	Supply and fix all plumbing works including water gutter, down pipes, 500 litres PVC water tank with 3 No. heavy duty press water taps and a water tank platform elevated 900mm from the ground.	Item	1.00	
С	600 x 450 mm composite man hole cover	Item	1.00	
	Carried to Collection			
	Element No.9: Provisional work for pit lining			
	Excavation			
A	Extra excavation 300mm wide to allow working space for wall lining	m <sup>3</sup>	17.00	
	Masonry			
A	225mmX225mmX400mm thick natural cut stone in pit lining wall bedded in cement sand mortar 1:3. Rate to include mild all reinforcement every course	m <sup>2</sup>	46.00	
	Concrete works			
A	250mm X 225mm reinforced concrete class 25 (1:2:4) tie beam to pit lining	m <sup>3</sup>	0.40	
В	250 mm X 225mm reinforced concrete class 25 (1:2:4) ground beam	m <sup>3</sup>	0.40	
С	200 mm thick concrete class 25 (1:2:4) in 600 mm wide foundation wall footing	m <sup>3</sup>	1.00	
	Reinforcement			
A	8mm diameter mild steel (0.4kg/m) in tie beam and ground beam	kg	36.00	
В	10mm diameter high tensile steel (0.616kg/m) in tie beam and ground beam	kg	60.00	
	Formwork			
A	Side of ring beam 250mm deep	$m^2$	6.00	
	Carried to Collection			
	Element No.10: Branding			

	Prepare a surface and undertake branding and hygiene messaging on the wall as it will be directed by the supervising Engineer to include donor logos and hygiene messaging art works on the private wall.	Item	1.00	
	SUMMARY			
1	EXCAVATION AND EARTHWORKS			
2	MASONRY WORK			
3	CONCRETE WORK			
4	CONCRETE ANCILLARIES			
5	ROOFING			
6	FIXTURES AND FITTINGS			
7	FINISHES			
8	DRAINAGE AND WATER SUPPLY			
9	PIT LININING			
10	BRANDING TOTAL COST FOR CALL BY OCK			
	TOTAL COST FOR ONE BLOCK			

### **B.** Boys Latrine

# CONSTRUCTION OF 1NO. (3-DOOR) VIP LATRINES FOR BOYS IN GURAM PRIMARY SCHOOL, LAISAMIS SUB COUNTY, MARSABIT COUNTY

Ite	Description	Unit	Quantit	Unit Rate	Amount(Kshs)
m			y		
	Element No.1: Excavation & Earth Works				
A	General excavation to remove top soil to an average depth of 150mm	$m^2$	23.00		
В	Bulk excavation for latrine pit approximately (3.2* 1.2) between 0.15-3m depth	$\mathrm{m}^3$	11.00		
С	Ditto but between 3-6m depth	$m^3$	12.00		
D	Ditto but for hard rock excavation (Provisional)	$m^3$	1.00		
Е	Excavation for wall footing, 600mm wide by 1000mm deep under all walls	$m^3$	8.70		
F	Bulk excavation for a soak pit 1.5m in diameter approximately 2.5m deep for waste water from hand washing	m <sup>3</sup>	5.00		
G	Back fill around masonry foundation footing with selected granular material well rammed in layers not exceeding 150mm thick	m <sup>3</sup>	4.00		

Н	Cart away surplus excavated material & deposit at recommended area	$m^3$	32.70	
I	300mm Approved hard-core, well compacted and blinded using 50mm Murram/quarry dust	m <sup>3</sup>	3.00	
	Carried to Collection			
	Element No.2: Masonry Work			
	Substructure			
A	225mmX225mmX400mm natural cut stone external and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course	m <sup>2</sup>	10.00	
	Superstructure			
A	150mmX225mmX400mm natural cut stone external and partition wall bedded in cement sand mortar 1:3 both side left for plastering. Rate to included mild all reinforcement at every course	$m^2$	35.00	
В	10mm wide DPM to walls	m	20.00	
	Carried to Collection			
	Element No.3: Concrete Work			
A	200mm thick concrete class 25 (1:2:4) in 600mm wide foundation wall footing.	$m^3$	1.20	
В	100mm concrete class 25 (1:2:4) in latrine slab	$m^3$	1.40	
С	100mm THK concrete class 15 (1:3:6) in 1500mm wide by 3700mm passage area	$m^3$	0.75	
D	200mm X 300mm Concrete Grade 25 (1:2:4) in ring beam/lintel	$m^3$	0.70	
Е	75mm Concrete Grade 15 (1:3:6) fort disabled person access ramp, sloping at 1:7	m <sup>3</sup>	0.50	
F	300mm wide 100mm thick mass concrete paved walkway around the latrine	$m^3$	0.50	
	Carried to Collection			
	Element No. 4: Concrete Ancillaries			
	Formwork			
	Provide cut and fix in position sawn timber formwork or equivalent.			
A	side of foundation footing 150mm wide	m	10.00	
В	edges ground slab 150mm wide	m	15.00	
С	Side of ring beam 250mm deep	$m^2$	6.00	
D	support props and floor slab	Item	1.00	
	Reinforcement			
	Steel reinforcement cut, bend & placed in position, unit price to include cutting, bending & placing in position with binding wire and concrete seats			
	Foundation Footing			
A	8mm diameter mild steel (0.40kg/m) in foundation footing	Kgs	20.00	
В	10mm diameter high tensile steel (0.616kg/m) in foundation footing	Kgs	25.00	
С	10mm diameter high tensile steel (0.616kg/m) in pit slab	Kgs	55.00	

E	12mm diameter high tensile steel (0.616kg/m) in ring beam	Kgs	30.00	
F	8mm diameter mild steel (0.40kg/m) in ring beam	Kgs	20.00	
	Carried to Collection			
	Element No.5: Roofing			
A	Corrugated sheets and BP760 Boxed profiled sheets (Effective 762 mm wide) Nailed to 50 X50 mm purlins.	$m^2$	13.00	
	Timber Work			
	All structure truss members shall be in seasoned cypress wood, painted two coats of anti-termite solution, and shall be tight fixed with top tie beam with 6mm diameter plain bar.			
A	a) 100 X 50mm wall plate	m	13.00	
В	b) 50X 75mm timber to rafter and tie beam	m	12.00	
С	c) 75 X 50mm vertical member	m	5.00	
D	e) 50x50mm roof purlin	m	20.00	
Е	200mmx 25mm pre-painted Facial Board	m	16.00	
	Vent Pipe			
A	provide a PVC vent pipe 110 mm diameter complete with fly screen to 200mm above the roof pitch	No	3.00	
	Carried to Collection			
	Element No.6: Fixtures and Fittings			
	Doors			
	Provide and install the following purpose made doors complete with fittings and locks			
A	Metal frames with metallic shutter door 900 X 2100mm to normal latrine	No	2.00	
В	Metal frames with Metallic shutter door 1150 X 2100mm to disabled persons latrine swinging either sides	No.	1.00	
С	Prepare and apply one primer coat to metal surfaces	$m^2$	7.00	
D	Prepare and apply one primer coat to metal surfaces and two finishing coats first grade oil paint	m <sup>2</sup>	7.00	
	Carried to Collection			
	Element No.7: Finishes			
	Wall			
A	Apply plaster to all Internal and External wall surfaces with cement sand mortar 1:2	m <sup>2</sup>	66.00	
В	15 mm thick cement sand (1:3) backing plaster to walls to receive tiling for the Urinal	m <sup>2</sup>	4.00	
С	Apply First grade plastic emulsion paint to all plastered wall faces	m <sup>2</sup>	60.00	
D	Provide 3 coats of bituminous paint to 0.6m from the ground.	$m^2$	6.00	
	Floor			
A	32 mm thick trowelled hard and smooth finished -with red oxide	m <sup>2</sup>	14.00	
В	Allow for forming of pit hole and construction of foot rest to details for normal toilets	No	2.00	

C	Provide and install ceramic tiles for the male urinal internal wall to height of 1.2m above slab surface	$m^2$	4.00		
D	Provide 150 diameter half-round Ceramic tile lined drain open urinal drainage channel	m	2.00		
Е	Provide and install 150mm urine drain pipe to the inspection chamber and to latrine pit	m	4.00		
F	Supply materials and install for disabled persons sato stool toilet and support rails as per Architectural drawings (to include in the disabled latrine and the access ramp)	Item	1.00		
	Carried to Collection				
	Element No.8: Drainage and Water Supply				
A	Provide a screed waterproof finish concrete hand washing basin complete with all fittings, details as shown on the drawing.	No	1.00		
В	Supply and fix all plumbing works including water gutter, down pipes, 500 litres PVC water tank with 3 No. heavy duty press water taps and a water tank platform elevated 900mm from the ground.	Item	1.00		
С	600 x 450 mm composite man hole cover	Item	1.00		
	Carried to Collection				
	Element No.9: Provisional work for pit lining				
	Excavation				
A	Extra excavation 500mm wide to allow working space for wall lining	m <sup>3</sup>	17.00		
	Masonry				
A	225mmX225mmX400mm thick natural cut stone in pit lining wall bedded in cement sand mortar 1:3. Rate to include mild all reinforcement every course	m <sup>2</sup>	46.00		
	Concrete works				
A	250mm X 225mm reinforced concrete class 25 (1:2:4) tie beam to pit lining	m <sup>3</sup>	0.40		
В	250 mm X 225mm reinforced concrete class 25 (1:2:4) ground beam	m <sup>3</sup>	0.40		
С	200 mm thick concrete class 25 (1:2:4) in 600 mm wide foundation wall footing	m <sup>3</sup>	1.00		
	Reinforcement				
A	8mm diameter mild steel (0.4kg/m) in tie beam and ground beam	kg	40.00		
В	10mm diameter high tensile steel (0.616kg/m) in tie beam and ground beam	kg	60.00		
	Formwork				
A	Side of ring beam 250mm deep	m <sup>2</sup>	6.00		
	I control of the second of the	1	1	1	
	Carried to Collection				

	Prepare a surface and undertake branding and hygiene messaging on the wall as it will be directed by the supervising Engineer (to include donor and IPs logos (5 No.) and hygiene messaging art works on the private wall.	Item	1.00	
	SUMMARY			
1	EXCAVATION AND EARTHWORKS			
2	MASONRY WORK			
3	CONCRETE WORK			
4	CONCRETE ANCILLARIES			
5	ROOFING			
6	FIXTURES AND FITTINGS			
0	FIXTURES AND FITTINGS			
7	FINISHES			
8	DRAINAGE AND WATER SUPPLY			
9	PIT LININING			
10	BRANDING			
	TOTAL COST FOR ONE BLOCK			

# **WORK PLAN**



### SECTION VIII - GENERAL CONDITIONS OF CONTRACT

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

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

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

### **General Conditions of Contract**

### A. General

### 1. Definitions

- 1.1 Bold face type is used to identify defined terms.
  - a) **The Accepted Contract** Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
  - b) **The Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
  - c) **The Adjudicator** is the person appointed jointly by the Procuring Entity and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
  - d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
  - e) **Compensation Events** are those defined in GCC Clause 42 hereunder.
  - f) **The Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
  - g) **The Contract** is the Contract between the Procuring Entity and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
  - h) **The Contractor** is the party whose Bid to carry out the Works has been accepted by the Procuring Entity.
  - i) **The Contractor's Bid** is the completed bidding document submitted by the Contractor to the Procuring Entity.
  - j) **The Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
  - k) **Days** are calendar days; months are calendar months.
  - 1) **Day work**s are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
  - m) **A Defect** is any part of the Works not completed in accordance with the Contract.
  - n) **The Defects** Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.
  - o) **The Defects Liability Period** is the period **named in the SCC** pursuant to Sub-Clause 34.1 and calculated from the Completion Date.
  - p) **Drawings** means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Entity in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
  - q) **The Procuring Entity** is the party who employs the Contractor to carry out the Works, **as specified in the SCC**, who is also the Procuring Entity.
  - r) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

- s) **"In writing" or "written"** means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- t) The Initial Contract Price is the Contract Price listed in the Procuring Entity's Letter of Acceptance.
- u) **The Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- v) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- w) **Plant i**s any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- x) **The Project Manager** is the person **named in the SCC** (or any other competent person appointed by the Procuring Entity and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- y) SCC means Special Conditions of Contract.
- z) The Site is the area of the works as defined as such in the SCC.
- aa) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- bb) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- cc) **The Start Date** is **given in the SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- dd) **A Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- ee) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- ff) **A Variation** is an instruction given by the Project Manager which varies the Works.
- gg) **The Works** are what the Contract requires the Contractor to construct, install, and turn over to the Procuring Entity, **as defined in the SCC**.

# 2. Interpretation

- 21 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 22 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 23 The documents forming the Contract shall be interpreted in the following order of priority:
  - a) Agreement,
  - b) Letter of Acceptance,
  - c) Contractor's Bid,
  - d) Special Conditions of Contract,
  - e) General Conditions of Contract, including Appendices,
  - f) Specifications,
  - g) Drawings,
  - h) Bill of Quantities<sup>6</sup>, and
  - i) any other document **listed in the SCC** as forming part of the Contract.

 $<sup>^6</sup>$ In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."

# 3. Language and Law

- 3.1 The language of the Contract is English Language and the law governing the Contract are the Laws of Kenya.
- 32 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Procuring Entity's Country when
- a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country; or
- b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

# 4. Project Manager's Decisions

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

### 5. Delegation

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

### 6. Communications

61 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

# 7. Subcontracting

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

### **8.** Other Contractors

81 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Procuring Entity between the dates given in the Schedule of Other Contractors, as **referred to in the SCC.** The Contractor shall also provide facilities and services for them as described in the Schedule. The Procuring Entity may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

### 9. Personnel and Equipment

- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 92 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
- 93 If the Procuring Entity, Project Manager or Contractor determines, that any employee of the Contractor be determined to have engaged in Fraud and Corruption during the execution of the Works, then that employee shall be removed in accordance with Clause 9.2 above.

## 10. Procuring Entity's and Contractor's Risks

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

### 11. Procuring Entity's Risks

- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Procuring Entity's risks:
  - a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
    - i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
    - ii) negligence, breach of statutory duty, or interference with any legal right by the Procuring Entity or by any person employed by or contracted to him except the Contractor.
  - b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Procuring Entity or in the Procuring Entity's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 112 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is a Procuring Entity's risk except loss or damage due to
  - aa) a Defect which existed on the Completion Date,
  - bb) an event occurring before the Completion Date, which was not itself a Procuring Entity's risk, or
  - cc) the activities of the Contractor on the Site after the Completion Date.

### 12. Contractor's Risks

121 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Procuring Entity's risks are Contractor's risks.

### 13. Insurance

- 13.1 The Contractor shall provide, in the joint names of the Procuring Entity and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the SCC** for the following events which are due to the Contractor's risks:
  - a) loss of or damage to the Works, Plant, and Materials;
  - b) loss of or damage to Equipment;
  - c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
  - d) personal injury or death.
- 132 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 133 If the Contractor does not provide any of the policies and certificates required, the Procuring Entity may effect the insurance which the Contractor should have provided and recover the premiums the Procuring Entity has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 134 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.
- 135 Both parties shall comply with any conditions of the insurance policies.

### 14. Site Data

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

### 15. Contractor to Construct the Works

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

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

161 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.

# 17. Approval by the Project Manager

- 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 172 The Contractor shall be responsible for design of Temporary Works.
- 173 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 175 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.

## 18. Safety

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

### 19. Discoveries

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

### 20. Possession of the Site

20.1 The Procuring Entity shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the SCC**, the Procuring Entity shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

### 21. Access to the Site

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

# 22. Instructions, Inspections and Audits

- 221 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 222 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and sub-consultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
- 223 The Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, the Procuring Entity and/or persons appointed by the Public Procurement Regulatory Authority to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Public Procurement Regulatory Authority. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Public Procurement Regulatory Authority's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Public Procurement Regulatory Authority's prevailing sanctions procedures).

### 23. Appointment of the Adjudicator

- 23.1 The Adjudicator shall be appointed jointly by the Procuring Entity and the Contractor, at the time of the Procuring Entity's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Procuring Entity does not agree on the appointment of the Adjudicator, the Procuring Entity will request the Appointing Authority designated in the SCC, to appoint the Adjudicator within 14 days of receipt of such request.
- 232 Should the Adjudicator resign or die, or should the Procuring Entity and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Procuring Entity and the Contractor. In case of disagreement between the Procuring Entity and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the SCC at the request of either party, within 14 days of receipt of such request.

# 24. Settlement of Claims and Disputes

### 241 Contractor's Claims

- 24.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 24.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Procuring Entity shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub- Clause shall apply.
- 24.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.
- 24.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Procuring Entity's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record- keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.
- 24.1.5 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:
  - a) this fully detailed claim shall be considered as interim;
  - b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
  - c) the Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.
- 24.1.6 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.
- 24.1.7 Within the above defined period of 42 days, the Project Manager shall proceed in accordance with Sub-Clause
- 24.1.8 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

- 24.1.9 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.
- 24.1.10 If the Project Manager does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Project Manager and any of the Parties may refer to Arbitration in accordance with Sub-Clause 24.4 [Arbitration].
- 24.1.11 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause 24.3.

### 242 Amicable Settlement

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

# 243 Matters that may be referred to arbitration

- 24.3.1 Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:
  - a) The appointment of a replacement Project Manager upon the said person ceasing to act.
  - b) Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
  - c) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
  - e) Any dispute arising in respect of war risks or war damage.
  - f) All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless the Procuring Entity and the Contractor agree otherwise in writing.

### 244 Arbitration

- 24.4.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 24.3 shall be finally settled by arbitration.
- 24.4.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
- 24.4.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 24.4.4 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.
- 24.4.5 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.
- 24.4.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.
- 24.4.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.
- 24.4.8 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Project Manager shall not be altered by reason of any arbitration being conducted during the progress of the Works.

24.4.9 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

### 245 Arbitration with National Contractors

- 24.5.1 If the Contract is with national contractors, arbitration proceedings will be conducted in accordance with the Arbitration Laws of Kenya. In case of any claim or dispute, such claim or dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed, on the request of the applying party, by the Chairman or Vice Chairman of any of the following professional institutions;
  - i) Architectural Association of Kenya
  - ii) Institute of Quantity Surveyors of Kenya
  - iii) Association of Consulting Engineers of Kenya
  - iv) Chartered Institute of Arbitrators (Kenya Branch)
  - v) Institution of Engineers of Kenya
- 24.5.2 The institution written to first by the aggrieved party shall take precedence over all other institutions.

# 246 Alternative Arbitration Proceedings

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

# 247 Failure to Comply with Arbitrator's Decision

- 24.7.1 The award of such Arbitrator shall be final and binding upon the parties.
- 24.7.2 In the event that a Party fails to comply with a final and binding Arbitrator's decision, then the other Party may, without prejudice to any other rights it may have, refer the matter to a competent court of law.

# 248 Contract operations to continue

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

### 25. Fraud and Corruption

- 25.1 The Government requires compliance with the country's Anti-Corruption laws and its prevailing sanctions policies and procedures as set forth in the Constitution of Kenya and its Statutes.
- 252 The Procuring Entity requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

### **B.** Time Control

### 26. Program

- 261 Within the time stated in the SCC, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.
- 262 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.

- 263 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
- 264 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

### 27. Extension of the Intended Completion Date

- 27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 272 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

### 28. Acceleration

- 281 When the Procuring Entity wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Procuring Entity accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Procuring Entity and the Contractor.
- 282 If the Contractor's priced proposals for an acceleration are accepted by the Procuring Entity, they are incorporated in the Contract Price and treated as a Variation.

# 29. Delays Ordered by the Project Manager

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

### 30. Management Meetings

- 301 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 302 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Procuring Entity. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

### 31. Early Warning

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

## C. Quality Control

# 32. Identifying Defects

321 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

# 33. Tests

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

### 34. Correction of Defects

- 34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 342 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

### 35. Uncorrected Defects

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

### D. Cost Control

# 36. Contract Price<sup>7</sup>

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

# 37. Changes in the Contract Price<sup>8</sup>

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

### 38. Variations

- 381 All Variations shall be included in updated Programs9 produced by the Contractor.
- 382 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
- 383 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 384 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a

- Compensation Event.
- 385 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning
- 386 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 39.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work
- 387 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;
  - a) the proposed change(s), and a description of the difference to the existing contract requirements;
  - b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Procuring Entity may incur in implementing the value engineering proposal; and
  - c) a description of any effect(s) of the change on performance/functionality.

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

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

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

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

### 39. Cash FlowForecasts

39.1 When the Program<sup>11</sup>, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

### 40. Payment Certificates

- 40.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 402 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 403 The value of work executed shall be determined by the Project Manager.
- 404 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed 12.
- 405 The value of work executed shall include the valuation of Variations and Compensation Events.
- 406 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 407 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (which would be the tender price), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: (corrected tender price tender price)/tender price X 100.

### 41. Payments

- 41.1 Payments shall be adjusted for deductions for advance payments and retention. The Procuring Entity shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If the Procuring Entity makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 412 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 413 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 414 Items of the Works for which no rate or price has been entered in shall not be paid for by the Procuring Entity and shall be deemed covered by other rates and prices in the Contract.

# **42.** Compensation Events

- 421 The following shall be Compensation Events:
  - d) The Procuring Entity does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
  - e) The Procuring Entity modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
  - f) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
  - g) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
  - h) The Project Manager unreasonably does not approve a subcontract to be let.
  - i) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
  - j) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Procuring Entity, or additional work required for safety or other reasons.
  - k) Other contractors, public authorities, utilities, or the Procuring Entity does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
  - 1) The advance payment is delayed.
  - m) The effects on the Contractor of any of the Procuring Entity's Risks.
  - n) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 422 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 423 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

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

### 43. Tax

43.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.

# 44. Currency y of Payment

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

### 45. Price Adjustment

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

### P = A + B Im/Io

where:

P is the adjustment factor for the portion of the

Contract Price payable.

A and B are coefficients<sup>13</sup> **specified in the SCC**, representing the non-adjustable and adjustable portions, respectively, of the Contract Price payable and Im is the index prevailing at the end of the month being invoiced and IOC is the index prevailing 30 days before Bid opening for inputs payable.

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

### 46. Retention

- 461 The Procuring Entity shall retain from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works.
- 462 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 53.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.

# 47. Liquidated Damages

- 47.1 The Contractor shall pay liquidated damages to the Procuring Entity at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the SCC. The Procuring Entity may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
- 472 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 41.1.

### 48. Bonus

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

### 49. Advance Payment

- 49.1 The Procuring Entity shall make advance payment to the Contractor of the amounts stated in the SCC by the date stated in the SCC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Procuring Entity in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
- 492 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 493 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

### **50.** Securities

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

### 51. Dayworks

- 51.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 512 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 513 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

### 52 Cost of Repairs

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

### E. Finishing the Contract

### 53. Completion

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

### 54. Taking Over

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

### 55. Final Account

55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

formulae for all currencies, since coefficient A, for the non-adjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other non-adjustable components. The sum of the adjustments for each currency are added to the Contract Price.

 $<sup>^{13}</sup>$ The sum of the two coefficients A and B should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the

### 56. Operating and Maintenance Manuals

- 561 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.
- 562 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC Sub-Clause 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the SCC** from payments due to the Contractor.

### 57. Termination

- 57.1 The Procuring Entity or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 572 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
  - a) the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
  - b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
  - c) the Procuring Entity or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction oramalgamation;
  - d) a payment certified by the Project Manager is not paid by the Procuring Entity to the Contractor within 84 days of the date of the Project Manager's certificate;
  - e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
  - f) the Contractor does not maintain a Security, which is required;
  - g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the SCC**; or
  - h) if the Contractor, in the judgment of the Procuring Entity has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then the Procuring Entity may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.
- 573 Notwithstanding the above, the Procuring Entity may terminate the Contract for convenience.
- 574 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
- 575 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental ornot.

### 58. Payment upon Termination

- 581 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as specified in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the Procuring Entity exceeds any payment due to the Contractor, the difference shall be a debt payable to the Procuring Entity.
- 582 If the Contract is terminated for the Procuring Entity's convenience or because of a fundamental breach of Contract by the Procuring Entity, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

# 59. Property

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

### **60.** Release from Performance

601 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Procuring Entity or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment wasmade.

# SECTION IX - SPECIAL CONDITIONS OF CONTRACT

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

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	A. General
GCC 1.1 (q)	The Procuring Entity is:
	CONCERN WORLDWIDE P.O. BOX 13850-00800 NAIROBI,KENYA
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be March,2024
GCC 1.1 (x)	The Project Manager is Evans Nyagwaya Senior Manager WASH
GCC 1.1 (z)	The Site is located at Namarei, Olturot and Ngororoi Village in Laisamis Sub county, Marsabit County.
GCC 1.1 (cc)	The Start Date shall be <b>January</b> ,2024
GCC 1.1 (gg)	The Works consist of Namarei Water Pan  Desilting and expansion of Namarei Water Pan Olturot Water Supply  Extension of water supply pipelines (3030m) of various sizes  Rehabilitation of 1No. Masonry tank (50m³)  Construction of 2 No Livestock troughs  Construction of 2 No. Water Kiosks  Construction of 12m High elevated steel tank (100m³)  Submersible Pump installation and Solarization  Construction of 6m high elevated steel tower Ngororoi Water supply Project.  Pipeline extension of various sizes. (3100m)  Rehabilitation of 5 No Masonry tanks of various sizes  Construction of spring box Intake  Rehabilitation of 2No Livestock troughs  Rehabilitation of Farm pipeline  Construction of 2 blocks of 3 door VIP latrines
GCC 5.1	The Project manager <i>may NOT</i> delegate any of his duties and responsibilities.
GCC 8.1	Schedule of other contractors: [insert Schedule of Other Contractors, if appropriate]
GCC 9.1	<ul> <li>Key Personnel</li> <li>GCC 9.1 is replaced with the following:</li> <li>9.1 Key Personnel are the Contractor's personnel named in this GCC 9.1 of the Special Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.</li> </ul>

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract			
GCC 14.1	Site Data are: As per the contract agreement			
GCC 20.1	The Site Possession Date(s) shall be: to be aligned once contract has been signed			
GCC 23.1 & GCC 23.2	Appointing Authority for the Adjudicator: As per the Kenyan Law			
	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: As per the Kenyan Law			
B. Time Contro				
GCC 26.1	The Contractor shall submit for approval a Program for the Works within <i>seven</i> days from the date of the Letter of Acceptance.			
C. Quality Con	trol			
GCC 34.1	The Defects Liability Period is: 90 days.			
D. Cost Control				
GCC 44.1	The currency of the Procuring Entity's Country is: <i>Kenya Shilling</i> .			
GCC 45.1	The Contract <i>is not</i> subject to price adjustment in accordance with GCC Clause 45, and the following information regarding coefficients <i>does not</i> apply.			
	[Price adjustment is mandatory for contracts which provide for time of completion exceeding 18 months]			
	The coefficients for adjustment of prices are: (NOT APPLICABLE)			
	(a) [insert percentage] percent nonadjustable element (coefficient A).			
	(ib) [insert percentage] percent adjustable element (coefficient B).			
	(c) The Index I for shall be [insert index].			
GCC 46.1	The proportion of payments retained is:10%			
GCC 49.1	The Advance Payments shall be: [insert amount(s)] and shall be paid to the Contractor no later than [insert date(s)]. <b>Not Applicable.</b>			
GCC 50.1	The Performance Security amount is 10% of the accepted contract amount.			
	(a) Performance Security – Bank Guarantee: in the amount(s) percent of the Accepted Contract Amount and in the same currency (ies) of the Accepted Contract Amount.			
	(b) Performance Security – Performance Bond: in the amount(s) of percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.			

### FORM No 1: NOTIFICATION OF INTENTION TO AWARD

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

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- 1. For the attention of Tenderer's Authorized Representative
  - i) Name: [insert Authorized Representative's name]
  - ii) Address: [insert Authorized Representative's Address]
  - iii) Telephone: [insert Authorized Representative's telephone/fax numbers]
  - iv) Email Address: [insert Authorized Representative's email address]

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

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

This Notification is sent by (Name and designation)

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

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

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

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

- a) The successful tenderer
  - i) Name of successful Tender\_
  - ii) Address of the successful Tender
- b) Other Tenderers

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

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

(Note a) State NE if not evaluated

# 5. How to request a debriefing

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

# 6. How to make a complaint

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

- ii) The complaint can only challenge the decision to award the contract.
- iii) You must submit the complaint within the period stated above.
- iv) You must include, in your complaint, all of the information required to support your complaint.

# 7. Standstill Period

- i) DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).
- ii) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.
- iii) The Standstill Period may be extended as stated in paragraph Section 5 (d) above.

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

Signature:	Name:
Title/position:	Telephone: Email:

# FORM NO. 2 - REQUEST FOR REVIEW

FORM FOR REVIEW (r.203(1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD
APPLICATION NOOF20
BETWEEN
APPLICANT
AND
RESPONDENT (Procuring Entity)
Request for review of the decision of the
REQUEST FOR REVIEW
I/We,the above named Applicant(s), of address: Physical address
1.
2.
By this memorandum, the Applicant requests the Board for an order/orders that:
1.
2.
SIGNED(Applicant) Dated onday of/20
FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board onday of20
SIGNED

**Board Secretary** 

# **FORM NO 3: LETTER OF AWARD**

[letterhead paper of the Procuring Entity] [date]

To: [name and address of the Contractor]

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

Authorized Signature:
Name and Title of Signatory:
Name of Procuring Entity
Attachment: Contract Agreement

# FORM NO 4: CONTRACT AGREEMENT

THIS	AGREEMENT made the	day of	, 20 , between
		of	, 20, between (hereinafter "the Procuring
Entity	r"), of the one part, and	of	(hereinafter
"the C	Contractor"), of the other part:		
execu	REAS the Procuring Entity desires ted by the Contractor, and has access and the remedying of any defects the	that the Works known asepted a Tender by the Contractor for the derein,	should be or the execution and completion of these
The P	Procuring Entity and the Contractor	agree as follows:	
1.	In this Agreement words and expre Contract documents referred to.	ssions shall have the same meanings	as are respectively assigned to them in the
2.	The following documents shall be Agreement shall prevail over all oth		onstrued as part of this Agreement. This
	a) the Letter of Acceptance		
	b) the Letter of Tender		
	c) the addenda Nos(if a	any)	
	d) the Special Conditions of Cont	ract	
	e) the General Conditions of Con	tract;	
	f) the Specifications		
	g) the Drawings; and		
	h) the completed Schedules and a	any other documents forming part of the	ne contract.
3.	Agreement, the Contractor hereby		ty to the Contractor as specified in this ity to execute the Works and to remedy stract.
4.	Works and the remedying of defec		tion of the execution and completion of the other sum as may become payable under the Contract.
	ITNESS whereof the parties hereto a on the day, month and year specif		xecuted in accordance with the Laws of
a:			
Signe	a and sealed by		(for the Procuring Entity)
Signe	d and sealed by		(for the Contractor).

# FORM NO. 5 - PERFORMANCE SECURITY

# $[Option\ 1\ -\ Unconditional\ Demand\ Bank\ Guarantee]$

uarantor letterhead]
neficiary:[insert name and Address of Procuring Entity] Date:
[Insert date of issue]
arantor: [Insert name and address of place of issue, unless indicated in the letterhead]
We have been informed that
Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of
This guarantee shall expire, no later than the Day of, 2 <sup>2</sup> , and any demand for payment under it must be received by us at the office indicated above on or before that date.
The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."
[Name of Authorized Official, signature(s) and seals/stamps].
<b>Note:</b> All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

 $<sup>^{\</sup>it l}$  The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency of the Contract or a freely convertible currency acceptable to the Beneficiary.

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

# FORM No. 6 - PERFORMANCE SECURITY

# [Option 2– Performance Bond]

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

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

SIGNED ON	on behalf of Byin the capacity of In the
presence of	
SIGNED ON	on behalf of By_in the capacity of In the
presence of	

# FORM NO. 7 - ADVANCE PAYMENT SECURITY

# [Demand Bank Guarantee]

[Gu	Guarantor letterhead]			
Beneficiary:		[Insert name and Address of Procuring Entity][Insert date of issue]		
AD	DVANCE PAYMENT GUARANTEE N	o.:[Insert guarantee reference number] Guarantor:_		
	[In.	sert name and address of place of issue, unless indicated in the letterhead]		
1.	We have been informed that	(hereinafter called "the Contractor") has entered into Contract with the Beneficiary, for the execution of		
2.		ording to the conditions of the Contract, an advance payment in the sum against an advance payment guarantee.		
3.	sums not exceeding in total an amount receipt by us of the Beneficiary's codemand itself or in a separate signed Applicant:  a) has used the advance payment for	s Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or of		
4.	A demand under this guarantee may b	e presented as from the presentation to the Guarantor of a certificate from the vance payment referred to above has been credited to the Contractor on its		
5.	repaid by the Contractor as specifie presented to us. This guarantee shal certificate indicating that ninety (90)	ntee shall be progressively reduced by the amount of the advance payment d in copies of interim statements or payment certificates which shall be l expire, at the latest, upon our receipt of a copy of the interim payment percent of the Accepted Contract Amount, less provisional sums, has been day of, 2, whichever is earlier. Consequently, plemand for received by us at this office on or before that date.		
6.		tension of this guarantee for a period not to exceed [six months] [one year], in equest for such extension, such request to be presented to the Guarantor before		
	[Name of Authorized Official, signati	ure(s) and seals/stamps]		
	Note: All italicized text (including for final product.	potnotes) is for use in preparing this form and shall be deleted from the		

<sup>&</sup>lt;sup>1</sup>The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency of the advance payment as specified

in the Contract.

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

# FORM NO. 8 - RETENTION MONEY SECURITY

[De	emand Bank Guarantee]	
[Gı	uarantor letterhead]	
Ber	neficiary:	[Insert name and Address of Procuring Entity]
Dat	te:	[Insert date of issue]
Ad	vance payment guarante	e no. [Insert guarantee reference number]
Gu	arantor: [Insert name and	d address of place of issue, unless indicated in the letterhead]
1.	shall be the name of t	[insert name of Contractor, which in the case of a joint venture the joint venture] (hereinafter called "the Contractor") has entered into Contract No. It reference number of the contract] dated with the Beneficiary, for the [insert name of contract and brief description of Works] (hereinafter
2.	the limit set forth in the Cunder the Contract and	stand that, according to the conditions of the Contract, the Beneficiary retains moneys up to Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued the first half of the Retention Money has been certified for payment, and payment of [insertention Money] is to be made against a Retention Money guarantee.
3.	sums not exceeding in words the Beneficiary's states identifying the demand	ontractor, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum of a total an amount of [insert amount in figures] ([insert amount in]) upon receipt by us of the Beneficiary's complying demand supported by ment, whether in the demand itself or in a separate signed document accompanying or d, stating that the Contractor is in breach of its obligation(s) under the Contract, without r show grounds for your demand or the sum specified therein.
4.	Beneficiary's bank stati	parantee may be presented as from the presentation to the Guarantor of a certificate from the ng that the second half of the Retention Money as referred to above has been credited to the unt numberat
5. Т	This guarantee shall expire any demand for paymen	e no later than the
6.		a one-time extension of this guarantee for a period not to exceed [six months] [one year], in arry's written request for such extension, such request to be presented to the Guarantor before tee.
	[Name of Authorized C	Official, signature(s) and seals/stamps]
	Note: All italicized text final product.	t (including footnotes) is for use in preparing this form and shall be deleted from the

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

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

### FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

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

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

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

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

Tender Reference No.:	[insert identification no] Name
of the Tender Title/Description:	[insert name of the assignment] to:
[insert com	aplete name of Procuring Entity]
In response to the requirement in your notification additional information on beneficial ownership:that are not applicable]	of award dated[insert date of notification of award] to furnish[select one option as applicable and delete the options

We here by provide the following beneficial ownership information.

**Details of beneficial ownership** 

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

- II) Am fully aware that beneficial ownership information above shall be reported to the Public Procurement Regulatory Authority together with other details in relation to contract awards and shall be maintained in the Government Portal, published and made publicly available pursuant to Regulation 13(5) of the Companies (Beneficial Ownership Information) Regulations, 2020.(Notwithstanding this paragraph Personally Identifiable Information in line with the Data Protection Act shall not be published or made public). Note that Personally Identifiable Information (PII) is defined as any information that can be used to distinguish one person from another and can be used to deanonymize previously anonymous data. This information includes National identity card number or Passport number, Personal Identification Number, Date of birth, Residential address, email address and Telephone number.
- III) In determining who meets the threshold of who a beneficial owner is, the Tenderer must consider a natural person who in relation to the company:
  - (a) holds at least ten percent of the issued shares in the company either directly or indirectly;
  - (b) exercises at least ten percent of the voting rights in the company either directly or indirectly;
  - (c) holds a right, directly or indirectly, to appoint or remove a director of the company; or
  - (d) exercises significant influence or control, directly or indirectly, over the company.
- IV) What is stated to herein above is true to the best of my knowledge, information and belief.

Name of the Tenderer:*[insert complete name of the Tenderer]
Name of the person duly authorized to sign the Tender on behalf of the Tenderer: ** [insert complete name of person
duly authorized to sign the Tender]
Designation of the person signing the Tender: [insert complete title of the person signing the Tender]
Signature of the person named above: [insert signature of person whose name and capacity are shown
above]
Date this

Bidder Official Stamp