





KAMWAMBA IRRIGATION PROJECT TENDER DOCUMENT VOLUME I.

This tender document comprises of three volumes as follows:

INVITATION TO TENDER INFORMATION TO BIDDERS GENERAL CONDITIONS OF CONTRACT PARTICULAR CONDITIONS OF CONTRACT CONTRACT FORMS

KAMWAMBA IRRIGATION PROJECT TENDER DOCUMENT COMPRISES OF THREE VOLUMES AS FOLLOWS:

1. INVITATION TO TENDER - ---- VOLUME I

BOOK OF DRAWINGS ---- VOLUME II
 SPECIFICATIONS ---- VOLUME III









NATIONAL AGRICULTURAL AND RURAL INCLUSIVE GROWTH PROJECT (NARIGP)

COUNTY SECRETARY & HEAD OF PUBLIC SERVICE COUNTY GOVERNMENT OF KIAMBU P.O. Box 2344-00900 KIAMBU

CONSTRUCTION OF KAMWAMBA IRRIGATION PROJECT KIAMBU COUNTY

(WORLD BANK FUND PROGRAMME)

TENDER NO; KE-KIAMBU-173914-CW-RFB-2020/2021

TENDER DOCUMENT VOLUME I

National Competitive Bidding Instruction to bids, conditions of contract & Bills of Quantities

Launched: 25TH JUNE 2020

Closing: 27TH JULY 2020 at 12.00 noon.

Pre-bid meeting: 7th july 2020

Name of Bidder:

EMPLOYER

COUNTY GOVERNMENT OF KIAMBU P.O. BOX 2344-00900 KIAMBU

REPUBLIC OF KENYA







SPECIFIC PROCUREMENT NOTICE MINISTRY OF AGRICULTURE, LIVESTOCK AND FISHERIES STATE DEPARTMENT OF AGRICULTURE NATIONAL AGRICULTURAL AND RURAL INCLUSIVE GROWTH PROJECT (NARIGP)

NATIONAL COMPETITIVE BIDDING (NCB)

Date **18th June 2020** LOAN NO: **P153349**

PROJECT ID NO.: KE-KIAMBU COUNTY-173914-CW-RFB

CONSTRUCTION OF KAMWAMBA IRRIGATION PROJECT IN

KIAMBU COUNTY

INVITATION TO TENDER NOTICE

NARIGP has received funds from the Government of Kenya, under the Component 3 for the construction and expansion of KAMWAMBA IRRIGATION PROJECT to undertake the project mentioned below. This is therefore to invite qualified contractors to submit sealed Bids for the tenders as shown below;

Tender no.	Project name	Project scope	County
Tender No: KE- KIAMBU- 173914-CW- RFB- 2020/2021	Construction of Kamwamba Irrigation Project Kiambu County	Rehabilitation of intake works, laying and fixing of pipe networks and all the required appurtenances as specified	KIAMBU

Obtaining bidding documents

Interested bidders may download Tender documents from the County website www.kiambu.go.ke. Those who wish to participate may send their details to Email: narigpkiambu@gmail.com.

Submission

Completed tender documents enclosed in plain envelopes must be delivered to the address below on or before 27TH JULY 2020 at **12.00 noon or deposited at the Tender box at the Thika Sub-County Offices outside Room No 15B**. Tenders will be opened in the presence of Bidders or their representatives who choose to attend at **12.00 noon** on **27TH JULY 2020** at the Thika Sub-County Chambers immediately thereafter.

The Tenders should be clearly marked with tender number and the project name.

The address referred to above is:

COUNTY SECRETARY & HEAD OF PUBLIC SERVICE COUNTY GOVERNMENT OF KIAMBU

P.O. Box 2344-00900

KIAMBU

Interested and eligible bidders may obtain further information and inspect the bidding documents at the office of the **County Project Coordinator**, **County Project Coordinating Unit** P.O. 2344-00900 KIAMBU

- 1. The provisions in the Instructions to Bidders and in the General Conditions of Contract are the provisions of the World Bank Standard Bidding Document: Procurement of Works.
- Bids should be clearly marked 'Construction of KAMWAMBA IRRIGATION PROJECT in KIAMBU County, Tender No. KE-KIAMBU-173914-CW-RFB-2020/2021 and deposited at the Tender box at the Thika Sub-County offices outside Room 15B or posted to

COUNTY SECRETARY & HEAD OF PUBLIC SERVICE COUNTY GOVERNMENT OF KIAMBU P.O. Box 2344-00900 KIAMBU

and should be received on or before 27TH JULY 2020 at 12.00 noon local time and MUST be accompanied by a bid guarantee as indicated in this tender document

Bulky bid documents that cannot fit in the tender box should be dropped at the Head of Supply Chain Management Office at Thika Sub-County offices.

8. Bids will be opened in the presence of bidders or their representatives who choose to attend at **12.00 noon on 27TH JULY 2020 at** the **Thika Sub-County Offices.**

County Project Coordinator **FOR: CHIEF OFFICER**

PART 1 – BIDDING PROCEDURES

Section I. Instructions to Bidders (ITB)

This Section provides relevant information to help Bidders prepare their bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of Contracts.

Section II. Bid Data Sheet (BDS)

This Section consists of provisions that are specific to each procurement and that supplement the information or requirements included in Section I, **Instructions to Bidders**.

Section III. Evaluation and Qualification Criteria

This Section contains the criteria to determine the lowest evaluated bid and the qualifications of the Bidder to perform the contract.

Section IV. Bidding Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid

Section V. Eligible Countries

This Section contains information regarding eligible countries.

PART 2 – EMPLOYER'S REQUIREMENTS

Section VI. Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Works to be procured.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII. General Conditions (GC)

This Section contains the general clauses to be applied in all contracts.

Section VIII. Particular Conditions (PC)

This Section consists of Contract Data and Specific Provisions which contains clauses specific to each contract. The contents of this Section supplement the General Conditions and shall be prepared by the Employer.

Section IX. Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for **Performance Security** and **Advance Payment**

Security, when required, shall only be completed by the successful Bidder after contract award.

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PART 1 – Bidding Procedures

Section I. Instructions to Bidders

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Section I. Instructions to Bidders

A. General

- Scope of Bid
 1.1 The Employer indicated in Section II, Bid Data Sheet (BDS) issues this Bidding Document for the procurement of Works, as specified in Section VI, Requirements. The name, identification, and number of lots are provided in the BDS.
 - 1.2 Unless otherwise stated, throughout this Bidding Document definitions and interpretations shall be as prescribed in Section VII, General Conditions.
- 2. Source of Funds 2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "funds") from the African Development Bank¹ (hereinafter called "the Bank") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
 - 2.2 Payments by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the financing agreement between the Borrower and the Bank (hereinafter called the Loan Agreement), and will be subject in all respects to the terms and conditions of that Loan Agreement. No party other than the Borrower shall derive any rights from the Loan Agreement or have any claim to the funds.
- 3. Fraud and Corruption
 3.1 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank Financing), as well as bidders, suppliers, and contractors, and their agents (whether declared or not), subcontractors, sub-consultants, service providers or suppliers, and any personnel thereof, under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts². In pursuance of this policy, the Bank:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:

The specific financing institution shall be as stipulated in the **BDS**.

² In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

- (i) "Corrupt Practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party³;
- (ii) "Fraudulent Practice" any act or omission, including a 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 parties⁴, designed to achieve an improper purpose, including to influence improperly the actions of another party; and
- (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 party⁵;
- (v) "Obstructive practice" is
 - (v.1) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation 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

(v.2) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 3.1(e) below.

(b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its subconsultants, 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

³ For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes Bank staff and employees of other organizations taking or reviewing procurement decisions.

⁴ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

⁵ For the purpose of this sub-paragraph, "party" refers to a participant in the procurement process or contract execution.

contract in question;

- (c) will declare misprocurement and cancel the portion of the Financing allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of such Financing engaged in Corrupt, Fraudulent, Collusive, Coercive or Obstructive Practices during the procurement or the implementation of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures⁶ including by publicly declaring such firm or individual ineligible to bid for, or to be awarded Bank-financed contracts either indefinitely or for a stated period of time, (i) to be awarded a Bank-fianced contract; (ii) to be a nominated⁷ sub-contractor, consultant, supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and
- (e) will require that a clause be included in bidding documents and in contracts financed by the Bank, requiring bidders, suppliers and contractors and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts and records and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by the Bank.
- 3.2 Furthermore, Bidders shall be aware of the provisions stated in Section VII, General Conditions.
- **4. Eligible Bidders** 4.1 A Bidder may be a natural person, private entity, government-owned entity—subject to **ITB** 4.5—or any combination of such entities supported by a letter of intent to enter into an agreement or under an existing agreement in the form of a joint venture, consortium, or

⁶ A firm or an individual may be declared ineligible to be awarded a Bank financed contract: (i) upon completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, or otherwise decided by the Bank; and through the application of the Proposal for the Implementation of a Sanctions Process within the World Bank Group; and (ii) as a result of temporary suspension or early temporary suspension in connection with an on-going sanction proceeding. See footnote 18 and paragraph 9 of Appendix 1 of the Rules and Procedures for Procurement of Goods and Works.

⁷ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding documents) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirement for the particular bid; or (ii) appointed by the Borrower."

association (JVCA). In the case of a joint venture, consortium, or association:

- (a) unless otherwise specified in the **BDS**, all partners shall be jointly and severally liable, and
- (b) the JVCA shall nominate a Representative who shall have the authority to conduct all businesses for and on behalf of any and all the partners of the JVCA during the bidding process and, in the event the JVCA is awarded the Contract, during contract execution.
- 4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with the Bank's **Rules and Procedures for Procurement of Goods and Works**, and as listed in Section V, Eligible Countries.⁸ A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including Related Services.
- 4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - (a) they have controlling partners in common; or
 - (b) they receive or have received any direct or indirect subsidy from any of them; or
 - (c) they have the same legal representative for purposes of this bid; or
 - (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
 - (e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder, in

⁸ Including eligibility criteria for participation in the supply of goods, works and related services.

more than one bid; or

- (f) a Bidder participated as a consultant in the preparation of Section VI, Requirements that are the subject of the bid.
- (g) a Bidder or any of its affiliates has been hired, or is proposed to be hired, by the Employer or the Borrower for the supervision of the contract.
- 4.4 A Bidder that is under a declaration of ineligibility by the Bank in accordance with **ITB** Clause 3, at the date of the deadline for bid submission or thereafter, shall be disqualified.
- 4.5 Government-owned entities in the Borrower's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under the principles of commercial law, and (iii) are not dependent agencies of the Employer or the Borrower.
- 4.6 Bidders shall not be under execution of a Bid–Securing Declaration in the Employer's Country.
- 4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.8 Firms from an eligible country shall be excluded if:
 - (a) as a matter of law or official regulation, the Borrower's country 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, the Borrower's country prohibits any import of Goods from that country or any payments to persons or entities in that country.
- 4.9 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- 4.10 A firm sanctioned by the Bank in accordance with the above ITB Clause 3.1 (d), or in accordance with the Bank's policies on anticorruption and fraud and Bank's sanctions procedures⁹, shall be ineligible to be awarded a Bank-financed contract, or to benefit from a Bank-financed contract, financially or in any other manner,

⁹ See the Proposal for the Implementation of a Sanctions Process within the World Bank Group and the Bank's Whistleblowing and Complaints Handling Policy. The Bank's sanctions procedures are publicly disclosed on the Bank's external website."

during the period of time determined by the Bank

- 5. Eligible Goods and Related
 Services
 5.1 All Goods and Related Services to be supplied under the Contract and financed by the Bank, shall have as their country of origin an eligible country of the Bank in accordance with the Bank's Rules and Procedures for Procurement of Goods and Works, as listed in Section V, Eligible Countries.
 - 5.2 For purposes of this Clause, the term "Goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "Related Services" includes services such as insurance, transportation, installation, and commissioning, training, and initial maintenance.
 - 5.3 The term "country of origin" means the country where the Goods have been mined, grown, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components.
 - 5.4 The nationality of the firm that produces, assembles, distributes, or sells the Goods shall not determine their origin.

B. Contents of Bidding Document

6.1 The Bidding Document consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with **ITB** 8.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bid Data Sheet (**BDS**)
- Section III. Evaluation and Qualification Criteria
- Section IV. Bidding Forms
- Section V. Eligible Countries

PART 2 Employer's Requirements

• Section VI. Requirements

PART 3 Conditions of Contract and Contract Forms

- Section VII. General Conditions (GC)
- Section VIII. Particular Conditions (PC)
- Section IX. Contract Forms

6. Sections of Bidding Document

- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Document.
- 6.3 The Bidder shall obtain the Bidding Document from the source stated by the Employer in the Invitation for Bids; otherwise the Employer is not responsible for the completeness of the Bidding Document.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.
- 7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's Bidding **Document**, Site address indicated in the BDS or raise his enquiries during the pre-Visit, Pre-Bid bid meeting if provided for in accordance with ITB 7.4. The Employer will respond to any request for clarification, provided that Meeting such request is received prior to the deadline for submission of bids, within the number of days specified in the BDS. The Employer response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.
 - 7.2 Where applicable, the Bidder is advised to visit and examine the project site and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for the provision of the Requirements. The costs of visiting the site shall be at the Bidder's own expense.
 - 7.3 Pursuant to **ITB** 7.2, where the Bidder and any of its personnel or agents have been granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the visit.
 - 7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the **BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. If so provided for in the BDS, the Employer will organize a site visit.

7. Clarification of

- 7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-bid meeting, including the text of the questions raised without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with **ITB** 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to **ITB** 8 and not through the minutes of the pre-bid meeting.
- 7.7 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.
- 8. Amendment of Bidding
 Bocument
 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
 - 8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with **ITB** 6.3.
 - 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to **ITB** 22.2

C. Preparation of Bids

- **9. Cost of Bidding 9.1** The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 10. Language of Bid 10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in that language, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- **11. Documents** 11.1 The Bid shall comprise the following:
 - Comprising the Bid (a) Letter of Bid
 - (b) Completed Schedules as provided in Section IV, Bidding

Forms:

- Bid Security or Bid-Securing Declaration, in accordance with (c) **ITB** 19:
- (d) at the Bidder's option, alternative proposals, if permissible, in accordance with ITB 13:
- written confirmation authorizing the signatory of the Bid to (e) commit the Bidder, in accordance with ITB 20.2;
- documentary evidence establishing the eligibility of the (f) Goods and Related Services offered by the Bidder, in accordance with **ITB** 17.1:
- documentary evidence establishing the Bidder's qualifications (g) in accordance with the requirements of Section III, Evaluation and Qualification Criteria, using the relevant forms furnished in Section IV, Bidding Forms;
- (h) documentary evidence as specified in the **BDS**, establishing the conformity of the Technical Proposal offered by the Bidder with the Bidding Document, using the relevant forms furnished in Section IV, Bidding Forms;
- in the case of a bid submitted by a JVCA, JVCA agreement, or (i) letter of intent to enter into a JVCA including a draft agreement, indicating at least the parts of the Requirements to be executed by the respective partners;
- any other document required in the BDS. (i)
- 12.1 The Bidder shall submit the Letter of Bid using the form furnished in and Price Section IV, Bidding Forms. This form must be completed without Schedules any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
- **13. Alternative Bids** 13.1 Unless otherwise indicated in the BDS, alternative proposals shall not be considered. If alternative proposals are permitted, their method of evaluation shall be as stipulated in Section III, Evaluation and Qualification Criteria.
 - 13.2 When alternative times for completion are explicitly invited, a statement to that effect will be included in the **BDS**, as well as the method of evaluating different times for completion.
 - 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the bidding document must first price the Employer's requirements as described in the

12. Letter of Bid

bidding document and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, 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 lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.

- 13.4 When specified in the BDS, Bidders are permitted to submit alternative technical solutions for specified parts of the requirements, and such parts shall be identified in the **BDS**, as will the method for their evaluation, and described in Section VI, Requirements.
- 14. Bid Prices and 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid Discounts and in the Price Schedules shall conform to the requirements specified in ITB 14.2.
 - 14.2 Unless otherwise provided in the BDS and the General Conditions (GC), the prices quoted by the Bidder shall be fixed.
 - 14.3 The Bidder shall submit a bid for the whole of the works described in **ITB** 1.1 by filling in prices for all items of the Works, as identified in Section IV, Bidding Forms. In case of admeasurement contracts, the Bidder 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 Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
 - 14.4 The price to be quoted in the Letter of Bid shall be the total price of the Bid, excluding any discounts offered.
 - 14.5 Unconditional discounts, if any, and the methodology for their application shall be quoted in the Letter of Bid, in accordance with **ITB** 12.1.
 - 14.6 If, pursuant to **ITB** 14.2, prices are adjustable, the Bidder shall furnish the indices and weightings for the price adjustment formula in the Schedule of Adjustment Data in Section IV (Bidding Forms) and the Employer may require the Bidder to justify its proposed indices and weightings.
 - 14.7 If so indicated in ITB 1.1, bids are invited for individual contracts or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with **ITB** 14.5, provided the bids for all contracts are submitted and

Related Services

opened at the same time.

- 14.8 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.
- 15. Currencies of Bid and be as specified in the BDS.Payment
- 16. Documents
 Establishing the Qualifications of the Bidder
 16.1 To establish its qualifications to perform the Contract in accordance with Section III, Evaluation and Qualification Criteria, the Bidder shall provide the information requested in Section IV, Bidding Forms.
 - 16.2 Bidders, individually or in joint ventures, applying for eligibility for margin of preference, if such margin applies pursuant to ITB 31.2, shall supply all information required to satisfy the criteria for eligibility as described in ITB 31.2.
- 17. Documents
 Establishing the Eligibility of the Goods and
 If a coordance with ITB Clause 5, Bidders shall complete the forms, included in Section IV, Bidding Forms.
- 18. Period of Validity of Bids18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Employer. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.
 - 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, the Bidder granting the request shall also extend the bid security for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB 18.3.
 - 18.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be adjusted as specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.

- 19. Bid Security19.1 The Bidder shall furnish as part of its bid, at the option of the Employer, and as stipulated in the BDS, the original of either a Bid-Securing Declaration or a bid security using the relevant form included in Section IV, Bidding Forms. In the case of a bid security, the bid security amount and currency shall be as specified in the BDS.
 - 19.2 A Bid-Securing Declaration shall use the form included in Section IV, Bidding Forms.
 - 19.3 If a bid security is specified pursuant to **ITB** 19.1, the bid security shall be a demand guarantee in any of the following forms at the Bidder's option:
 - (a) an unconditional guarantee issued by a bank or surety;
 - (b) an irrevocable letter of credit; or
 - (c) a cashier's or certified check;

from a reputable source from an eligible country. If the unconditional guarantee is issued by an insurance company or a bonding company located outside the Employer's Country, the issuer shall have a correspondent financial institution located in the Employer's Country to make it enforceable. In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms or in another substantially similar format approved by the Employer prior to bid submission. In either case, the form must include the complete name of the Bidder. The bid security shall be valid for thirty days (30) beyond the original validity period of the bid, or beyond any period of extension if requested under **ITB** 18.2.

- 19.4 Pursuant to the option stipulated at **ITB** 19.1, any bid not accompanied by a substantially responsive bid security or Bid-Securing Declaration shall be rejected by the Employer as non-responsive.
- 19.5 If a bid security is specified pursuant to **ITB** 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to **ITB** 38.
- 19.6 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.7 The bid security may be forfeited or the Bid-Securing Declaration executed:
 - (a) if a Bidder withdraws its bid during the period of bid validity

specified by the Bidder in the Letter of Bid or

- (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with **ITB** 37; or
 - (ii) furnish a performance security in accordance with ITB 38.
- 19.8 The Bid Security or the Bid Securing Declaration of a JVCA shall be in the name of the JVCA that submits the bid. If the JVCA has not been legally constituted into a legally enforceable JVCA at the time of bidding, the Bid Security or the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent referred to in **ITB** 4.1.
- 19.9 If a Bid-Securing Declaration is executed in accordance with **ITB** 19.7, the Employer will declare the Bidder ineligible to be awarded a contract by the Employer for the period of time stated in the Form of Bid-Securing Declaration.
- 20. Format and Signing of Bid20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL." In addition, the Bidder shall submit copies of the bid, in the number specified in the BDS and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
 - 20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the **BDS** and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries have been made shall be signed or initialled by the person signing the bid.
 - 20.3 A bid submitted by a JVCA shall comply with the following requirements:
 - (a) Unless not required in accordance with **ITB** 4.1 (a), be signed so as to be legally binding on all partners and
 - (b) Include the Representative's authorization referred to in ITB 4.1 (b), consisting of a power of attorney signed by those legally authorized to sign on behalf of the JVCA.
 - 20.4 Any amendments, interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.

22. Deadline for

Bids

D. Submission and Opening of Bids

- 21. Submission, 21.1 Bidders may always submit their bids by mail or by hand. If so Sealing and specified in the **BDS**, bidders shall have the option of submitting **Marking of Bids** their bids electronically. Procedures for submission, sealing and marking are as follows:
 - (a)Bidders submitting bids by mail or by hand shall enclose the original and copies of the Bid in separate sealed envelopes. If so permitted in accordance with ITB 13, alternative proposals, and copies thereof, shall also be placed in separate envelopes. The envelopes shall be duly marked as "ORIGINAL," "ALTERNATIVE," "ORIGINAL COPY," and "ALTERNATIVE COPY" These envelopes shall then be enclosed in one single package. The rest of the procedure shall be in accordance with **ITB** 21.2 and 21.3.
 - (b)Bidders submitting bids electronically shall follow the electronic bid submission procedures specified in the BDS.
 - 21.2 The inner and outer envelopes shall:

(a) bear the name and address of the Bidder;

- (b)be addressed to the Employer in accordance with ITB 22.1;
- (c) bear the specific identification of this bidding process pursuant to **ITB** 1.1: and
- (d)bear a warning not to open before the time and date for bid opening
- 21.3 If envelopes and packages are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
- 22.1 Bids must be received by the Employer at the address and no later Submission of than the date and time indicated in the **BDS**.
 - 22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- 23. Late Bids 23.1 The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.

- 24. Withdrawal, Substitution, and Modification of Bids
 24.1 A Bidder may withdraw, substitute, or modify its bid 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 ITB 20.2., (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
 - (a) prepared and submitted in accordance with **ITB** 20 and **ITB** 21 (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 Employer prior to the deadline prescribed for submission of bids, in accordance with **ITB** 22.
 - 24.2 Bids requested to be withdrawn in accordance with **ITB** 24.1 shall be returned unopened to the Bidders.
 - 24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.
- 25. Bid Opening 25.1 The Employer shall conduct the bid opening in public, in the presence of Bidders' designated representatives and anyone who choose to attend, and at the address, date and time specified in the BDS. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 21.1, shall be as specified in the BDS.
 - 25.2 First, envelopes marked "Withdrawal" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "Substitution" shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "Modification" shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening. Only bids that are opened and read out at bid opening shall be considered further.
 - 25.3 The Employer shall open all other envelopes one at a time and read

out: the name of the Bidder, the Bid Price(s), any discounts and their application methodology, alternative bids, the presence or absence of a bid security or Bid-Securing Declaration; and any other details as the Employer may consider appropriate. Only discounts and alternative bids read out at bid opening shall be considered for evaluation. No bid shall be rejected at bid opening except for late bids, in accordance with **ITB** 23.1.

25.4 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot if applicable, including any discounts and alternative proposals; and the presence or absence of a bid security or a Bid-Securing Declaration. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted bids in time, and posted online when electronic bidding is permitted.

E. Examination of Bids

- **26. Confidentiality** 26.1 Information relating to the evaluation of bids shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
 - 26.2 Any attempt by a Bidder to influence improperly the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.
 - 26.3 Notwithstanding **ITB** 26.1, from the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it should do so in writing.
- 27. Clarification of Bids
 27.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid, allowing a reasonable time for response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 29.

- 27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification, its bid may be rejected.
- 28. Determination 28.1 The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB11.Responsiveness
 - 28.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission.
 - (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
 - 28.3 A material deviation, reservation, or omission is one that,
 - (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality, or performance of the Schedule of Requirements as specified in Section VI; or
 - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer]'s rights or the Bidder's obligations under the proposed Contract; or
 - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.
 - 28.4 The Employer shall examine the technical aspects of the bid in particular, to confirm that all requirements of Section VI have been met without any material deviation, reservation, or omission.
 - 28.5 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
 - 28.6 Provided that a bid is substantially responsive, the Employer may waive any quantifiable nonconformity in the bid that does not

constitute a material deviation, reservation or omission.

- 28.7 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.
- 28.8 Provided that a bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the non-conforming item or component. The adjustment shall be made using the methodology indicated in Section III, Evaluation and Qualification Criteria.

F. Bid Evaluation and Comparison

- **29.** Correction of 29.1 The Employer shall use the criteria and methodologies indicated in Arithmetical Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted Errors
 - 29.2 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors as indicated in Section III, Evaluation and **Qualification Criteria**
 - 29.3 If a Bidder does not accept the correction of errors, its bid shall be declared non-responsive and its Bid Security shall be forfeited or the Bid-Securing Declaration executed.
- **30.** Conversion to 30.1 For evaluation and comparison purposes, the currency(ies) of the bid **Single Currency** shall be converted into a single currency as specified in Section III, Evaluation and Qualification Criteria.
- **31. Bid Adjustments** 31.1 For evaluation and comparison purposes the Employer shall adjust the bid prices using the criteria and methodology specified in Section III, Evaluation and Qualification Criteria.
 - 31.2 Unless otherwise specified in the BDS, no margin of domestic or regional preference shall apply. If a margin of preference applies, the application methodology shall be as specified in Section III, Evaluation and Qualification Criteria, and in accordance with the provisions stipulated in the Bank's Rules and Procedures for **Procurement of Goods and Works.**
 - 31.3 If in the opinion of the Employer the bid which results in the lowest Evaluated Bid, is seriously unbalanced or front loaded or

substantially below the Employer's estimates, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

- 32. Qualification of the Bidder32.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
 - 32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to **ITB** 16.
 - 32.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
 - 32.4 The capabilities of the manufacturers and subcontractors proposed in its Bid to be used by the lowest evaluated Bidder for identified major items of the Requirements will also be evaluated for acceptability in accordance with the criteria and methodologies defined in Section III, Evaluation and Qualification Criteria. Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or subcontractor without any change to the bid price.
- **33. Comparison of Bid 33.1 Subject to ITB 29, 30 and 31, the Employer shall compare all** substantially responsive bids to determine the lowest evaluated bid.
- 34. Employer's Right to Accept Any Bid, and to Reject Any or All Bids
 34.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

G. Award of Contract

- **35. Award Criteria** 35.1 Subject to **ITB** 34.1, the Employer shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 36. Notification of Award
 36.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Contract Forms called "the Contract Price").
 - 36.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
 - 36.3 At the same time, the Employer shall also notify all other Bidders of the results of the bidding process, and shall publish online in the official county website(www.kiambu.go.ke), the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their bids were not selected. The Employer shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests a debriefing.
 - 37.1 Promptly upon notification, the Employer shall send the successful Bidder the Contract Agreement.
 - 37.2 Within thirty (30) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
 - 37.3 Upon the successful Bidder's furnishing of the signed Contract Agreement and Performance Security pursuant to **ITB** 38, the Employer will discharge its Bid Security, pursuant to **ITB** 19.
 - 37.4 Notwithstanding **ITB** 37.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Employer, to the country of the Employer, or to the use of the

37. Signing of Contract products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its bid, always provided, however, that the Bidder can demonstrate to the satisfaction of the Employer and of the Bank that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract Agreement.

- 38. Performance Security
 38.1 Within thirty (30) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 31.3, using for that purpose the Performance Security Form included in Section IX, Contract Forms, or another form acceptable to the Employer. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.
 - 38.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, or execution of the Bid-Securing Declaration. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

Section II. Bid Data Sheet

	A. General
ITB 1.1	The number of the Invitation for Bids is : KE-KIAMBU-173914-CW-RFB-2020/2021
ITB 1.1	The Employer is: Chief Officer, Department of Agriculture, Livestock and Irrigation-KIAMBU County
ITB 1.1	The name of the bidding process is: National Competitive Bidding
	The identification number of the bidding process is: KE-KIAMBU-173914-CW-RFB
	The number and identification of lots comprising this bidding process are: N/A
ITB 2.1	The Borrower is: Government of Kenya
ITB 2.1	The specific Bank financing institution is: World Bank/GOK
ITB 2.1	The name of the Project is: National Agricultural And Rural Inclusive Growth Project (NARIGP)
ITB 4.1(a)	The individuals or firms in a joint venture, consortium or association "shall be" jointly and severally liable.
ITB 4.4	A list of debarred firms is available at http://www.afdb.org/debarred
	B. Contents of Bidding Document
ITB 7.1	Attention: County Project Coordinator Physical Address: kiambu, Sub-County offices P.O. Box 2344-00900 KIAMBU, Kenya Floor/Room number: 1 st floor City: KIAMBU ZIP Code: N/A Country: KENYA Electronic mail address: narigpkiambu@gmail.com Requests for clarifications should be received by the Employer not later than ten (10) days, prior to the deadline for submission of Bids.
ITB 7.4	A Pre-Bid meeting "shall" take place.

	C. Mandatory Preparation of Bids	
ITB 10.1	The language of the bid is: English	
ITB 11.1 (h)	 The Bidder must provide the following Mandatory Documentary Evidence to establish the conformity of the Technical Proposal with the Bidding Document: Certificate of registration/incorporation CR12 form A valid tax compliance certificate Copy of the Bidder's VAT registration certificate or equivalent A valid single business permit National Construction Authority (NCA 3,4 and 5) certificate Duly filled and signed form of tender and Confidential Business Questionnaire in the company letterhead and in the format attached. Pre-bid meeting certificate Serialized documents 	
ITB 11.1 (j)	 The Bidder shall submit with its bid the following additional documents for technical : Written authorization for the person signing the documents from the company/Power of Attorney Joint venture agreement, in the required format, for those submitting bids as joint ventures A bid guarantee from a Bank in the format given/attached and shall be valid for thirty days (30) beyond the original validity period of the bid Evidence of similar works undertaken in the last five years List of proposed personnel, signed CV's and clear proposed positions/tasks for each List of equipment proposed for the works (provide proof of ownership, lease or hire) Clear work program/plan Audited financial statements for the last three years 	
ITB 13.1	Alternative bids are not permitted.	
ITB 13.2	Alternatives to the Times for Completion "shall not be" permitted. If alternatives to the Times for Completion are permitted, the evaluation method will be as specified in Section III, Evaluation and Qualification Criteria.	
ITB 13.4	Alternative technical solutions shall be permitted for the following parts of the Works, as further detailed in the Specification: "none".	

ITB 14.2	Prices "shall be" fixed. Prices are inclusive of all taxes.
ITB 14.6	The prices quoted by the Bidder "shall not be" subject to adjustment during the performance of the Contract.
ITB 15.1	The currency of the bid and payment shall be: Kenya Shilling (KES)
ITB 18.1	The bid validity period shall be: 120 days.
ITB 19.1	The Bidder shall furnish a bid security, in the amount of KES 2,000,000 Bank Guarantee
ITB 20.1	In addition to the original of the Bid, the number of copies is: 1 copy
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall indicate:
	 (a) The name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid such as a Power of Attorney, authorization letter in company stationery; and
	(b) In the case of Bids submitted by an existing or intended JVCA an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, if so required in accordance with ITB 4.1(a), and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JVCA during the bidding process and, in the event the JV is awarded the Contract, during contract execution."
	D. Submission and Opening of Bids
ITB 21.1	Bidders "shall not" have the option of submitting their bids electronically.
ITB 21.1 (b)	The electronic bidding submission procedures shall be: None
ITB 22.1	For <u>bid submission purposes</u> only, the Employer's address is : Attention: Chief officer, County Department of Agriculture, Livestock and Irrigation Physical Address: Thika Sub-County Offices Floor/Room number: Ground Floor City: Thika ZIP Code: P.O. Box 2344-00900 KIAMBU Country: KENYA The deadline for bid submission is: Date: 27TH JULY 2020

	Time: 12.00 noon
ITB 25.1	The bid opening shall take place at:Physical Address: Thika Sub-County Office Room No 15BFloor/Room number: Ground FloorCity : ThikaCountry: KenyaDate: : 27TH JULY 2020Time: 12.00 noon
ITB 25.1	The electronic bid opening procedures shall be: None
	F. Bid Evaluation and Comparison
ITB 31.2	A margin of domestic or regional preference "shall not" apply.

Section III. Evaluation and Qualification Criteria

1. Evaluation Criteria and Methodology

1.1 Alternative Proposal (If permitted in accordance with ITB 13.1)

Technical Alternative **None** Alternative Time for Completion **None**

1.2 Correction of Arithmetical Errors (In accordance with ITB 29.1)

- (a) Where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the Total Price, the former shall prevail and the latter will be corrected accordingly
- (b) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- (c) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (d) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

1.3 Conversion to a Single Currency (In accordance with ITB 30)

Not applicable.

1.4 Discounts (In accordance with ITB 14.5)

The Employer will adjust the Bid Price, using the methodology prescribed by the Bidder in its Letter of Bid, to take account of the Discounts offered by the Bidder in its Letter of Bid, as read out at the Bid Opening.

1.5 Quantifiable Nonmaterial Nonconformities (In accordance with ITB 28.8)

The adjustment shall be made using the following methodology: [none]

1.6 Margin of Domestic or Regional Preference (If permitted in accordance with ITB 31.2)

None

1.7 Any other Criteria or Methodology

See Section II & Section VIII

2. Qualification Criteria

2	Qualification (Without Prequalification)
2.1	Eligibility (TABLE)
2.2	Historical Contract Non-Performance (TABLE)
2.3	Financial Situation (TABLE)
2.4	Experience (TABLE)
2.5	Personnel (TABLE)
2.6	Equipment (TABLE)

Factor	2.1 Eligibility					
			Bic	lder		
Sub-Factor	Requirement	Single Entity	Joint V	enture, Conso Association	rtium or	Documentation Required
			All partners combined	Each partner	At least one partner	
2.1.1 Nationality	Nationality in accordance with ITB 4.2.	Must meet requirement	Existing or intended JVCA must meet requirement	Must meet requirement	N / A	Form ELI –1.1 and 1.2, with attachments
2.1.2 Conflict of Interest	No- conflicts of interests as described in ITB 4.3.	Must meet requirement	Existing or intended JVCA must meet requirement	Must meet requirement	N/A	Letter of Bid
2.1.3 Bank Ineligibility	Not having been declared ineligible by the Bank as described in ITB 4.4.	Must meet requirement	Existing JVCA must meet requirement	Must meet requirement	N / A	Letter of Bid
2.1.4 Government Owned Entity	Compliance with conditions of ITB 4.5	Must meet requirement	Must meet requirement	Must meet requirement	N / A	Form ELI –1.1 and 1.2, with attachments
2.1.5 Ineligibility based on a United Nations resolution or Borrower's country law	Not having been excluded as a result of the Borrower's country laws or official regulations, or by an act of compliance with UN Security Council resolution, in accordance with ITB 4.8	Must meet requirement	Existing JVCA must meet requirement	Must meet requirement	N / A	Letter of Bid

2. Qualification Tables (Without Prequalification)

Factor	2.2 Historical Contract Non-Perfor	mance				
		Criteria				
]	Bidder		
Sub-Factor	Requirement	G1	Joint	Venture, Consor Association	tium or	Documentati on Required
	Keyun ement	Single Entity	All partners combined	Each partner	At least one partner	
2.2.1 History of non-performing contracts	Non-performance of a contract did not occur within the last two (2) years prior to the deadline for application submission, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the bidder have been exhausted.	Must meet requirement by itself or as partner to past or existing JVCA	N / A	Must meet requirement by itself or as partner to past or existing JVCA	N / A	Form CON - 2
2.2.2 Failure to Sign Contract	Not being under execution of Bid-Securing Declaration pursuant to ITB 4.6 for two (2No) years	Must meet requirement	N/A	Must meet requirement by itself or as partner to a JVCA	N / A	Letter of Bid
2.2.3 Pending Litigation	All pending litigation shall in total not represent more than five percent (5%) of the Bidder's net worth and shall be treated as resolved against the Bidder.	Must meet requirement by itself or as partner to past or existing JVCA	N/A	Must meet requirement by itself or as partner to past or existing JVCA	N / A	Form CON – 2

Factor	2.3 Financial Situation					
S E star			B	Bidder		Documentation
Sub-Factor	Requirement	Star alla	Joint Ventu	re, Consortium	or Association	Required
		Single Entity	All partners combined	Each partner	At least one partner	
2.3.1 Historical Financial Performance	Submission of audited balance sheets or if not required by the law of the bidder's country, other financial statements acceptable to the Employer, for the last three [3No] years to demonstrate the current soundness of the bidders financial position and its prospective long term profitability. (a) Audited accounts in comparative form (b) Valid Tax Compliance (c) Cash flow statements (Supported by Bank statements)	Must meet requirement	N / A	Must meet requirement	N / A	Form FIN – 3.1 with attachments
2.3.2. Average Annual Turnover	Minimum average annual turnover of KES 20 million, calculated as total certified payments received for contracts in progress or completed, within the last three (3No) years	Must meet requirement	Must meet requirement	Must meet percent (%) of the requirement	Must meet percent (%) of the requirement	Form FIN –3.2

Factor	2.3 Financial Situation							
		Criteria						
Sub-Factor			E	Bidder		Documentation		
Sub-ractor	Requirement	G• 1	Joint Ventu	re, Consortium	or Association	Required		
	Requirement	Single Entity	All partners combined	Each partner	At least one partner			
2.3.3. Financial Resources	The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet: (i) the following cash-flow requirement: Current ratio = Liquid Assets Liquid liabilities Greater than 1 and Debt Ratio = <u>Total Debt</u> Total Assets Less than 1 and (ii) the overall cash flow requirements for this contract and its current commitments.	Must meet requirement	Must meet requirement	Must meet fifty percent (50%) of the requirement	Must meet seventy five percent (75%) of the requirement	Form FIN –3.3 + Form CCC		

Factor	2.4 Experience					
			Bid	lder		
Sub-Factor	Requirement	G- 1	Joint V	enture, Conso Association		Documentation Required
	Kequitement	Single Entity	All partners combined	Each partner	At least one partner	
2.4.1 General Experience	Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last five [5No] years prior to the applications submission deadline, and with activity in at least nine (6) months in each year.	Must meet requirement	N/A	Must meet requirement	N / A	Form EXP-4.1
2.4.2 Specific Experience	(a)Participation as contractor, management contractor, or subcontractor, in at least three (3No) Water and irrigation Contracts within the last six (6No) years, each with a value of at least fifty million (KES 45 Million.), that have been successfully and substantially completed and that are similar to the proposed Works. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Section VI, Requirements.	Must meet requirement	Must meet requirements for all characteristics	N / A	Must meet requirement for one characteristic	Form EXP 2.4.2(a)

Factor	2.4 Experience					
		Criteria				
			Bic	lder		
Sub-Factor	Requirement	C! 1	Joint V	t Venture, Consortium or Association		Documentation Required
		Single Entity	All partners combined	Each partner	At least one partner	
2.4.2 Specific Experience	 b) For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum experience in the following key activities: 1. Intake works across a permanent river. 2. Pipe installation works especially in HDPE /GI or uPVC. 3. Water spillway excavation and stabilization. 4. Water draw-off system installation 5. Plumbing works. 6. Masonry works 	Must meet requirements	Must meet requirements	N / A	Must meet requirements	Form EXP- 2.4.2(b)

2.5 Personnel

The Bidder must demonstrate that it will have the personnel for the key positions that meet the following requirements:

Staff Position	Minimum	Total	In similar works
	Qualifications	Specific experience	Experience (years)
		(years)	
Site Agent	BSc.(Civil /Agricultural Engineering)	8 years supervising Irrigation	10 years construction of
	and registered with EBK	Infrastructural construction	irrigation infrastructural works
		works	or other civil works
Surveyor*	Bsc. in Survey and Photogrammetry or	5 in surveying for irrigation	5 years in surveying for
	its equivalent and registered with their	infrastructure projects	construction projects
	professional body (conversant in		
	AUTOCAD/CIVIL 3D)		
Concrete Foreman	Diploma (civil/Agricultural	5 years constructions in works	5 years in general constructions
	Engineering) or building construction	for irrigation schemes	of civil works
Plumber	Certificate in plumbing works	5 years constructions in works	5 years in general constructions
		for irrigation schemes	of civil works
Environmental/Safety Expert	Bsc. In environmental science/ natural	5years in carrying out ESIA/EA	5years in carryings ESIAs/EAs
	science or its equivalent and be	for irrigation projects	
	registered by NEMA as a lead expert		

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Forms included in Section IV, Bidding Forms.

2.6 Equipment

The Bidder must demonstrate that it will have access to the key Contractor's equipment listed hereafter:

S/no.	Description	Minimum (Rating/capacity)	Quantity (No.)
1	Van or Utility vehicle	1 tonne	1
2	Excavator	1.0 m^3	1
3	Concrete mixer	1 m ³	2
4	Dewatering Pumps	100 mm dia. delivery	1
5	Concrete Vibrators (poker)	3 KVA (Output)	2

6	Generator	500KVA	1
7	Survey Equipment	Total Station with all the accessories(or a superior	1
		survey equipment)	

Section IV. Bidding Forms

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Letter of Bid	
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Summary of Payment Currencies	
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Form of Bid-Securing Declaration	
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Construction Schedule	
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Bidder Information Sheet	
Party to JVCA Information Sheet	
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Current Contract Commitments / Works in Progress	
Financial Situation	
Average Annual Turnover	
Financial Resources	
General Experience	
Specific Experience	
Specific Experience in Key Activities	

FORM OF TENDER

Date

Tender No.....

To:

.....

••••

[Name and address of procuring entity]

Gentlemen and/or Ladies:

1. Having examined the tender documents including Addenda

2. We undertake, if our Tender is accepted, to deliver install and commission the equipment in accordance with the delivery schedule specified in the Schedule of Requirements.

3. If our Tender is accepted, we will obtain the guarantee of a bank in a sum of equivalent to percent of the Contract Price for the due performance of the

Contract , in the form prescribed by(Procuring entity).

4. We agree to abide by this Tender for a period of [Number] days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. This Tender, together with your written acceptance thereof and your notification of award, shall constitute a Contract, between us. Subject to signing of the Contract by the parties.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this day of
month2016
••••
[Signature] [In the capacity of]
Duly authorized to sign tender for and on behalf
of

CONFIDENTIAL BUSINESS QUESTIONNAIRE FORM

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

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

Part 1 – General:

Business Name

.....

•••••

Location of business premises.

Plot No..... Street/Road

Postal Address Fax

Nature of Business

•••••

Registration Certificate No.

.....

Maximum value of business which you can handle at any one time – Kshs.

Name of your bankers Branch

Part 2 (a) – Sole Proprietor

Your name in full Age

Nationality Country of origin
• Citizenship details
Part 2 (b) Partnership
Given details of partners as follows:
Name Nationality Citizenship Details Shares
1.
2.
••••••
3.
•
4.
•
Part 2 (c) – Registered Company
Private or Public

State the nominal and issued capital of company-
Nominal Kshs.
Issued Kshs
Given details of all directors as follows
Name Nationality Citizenship Details Shares
1
••••••
2.
•••••••
3.
••••••
4.
••••••
5
•••••••••••••••••••••••••••••••••••••••
Date Signature of Candidate

If a Kenya Citizen, indicate under "Citizenship Details" whether by Birth, Naturalization or

Registration

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Bill of Quantities/Schedules of Prices

	GRAND SUMMARY SHEET	
Bill No.	Description	Amount (KSh)
1	Preliminaries and General	
2	Improvement of Head Works	
3	Conveyance Pipeline	
4	Branch pipelines	
5	Distribution Pipelines	
6	Plot Hydrants	
7	Day Works (Provisional)	
8	ESMP Implementation and compliance	
	Sub-Total	
I.	Allow- 3% Contingency	
II.	Allow contractual fee- 3%	
III.	Allow- 14% VAT	
	GRAND TOTAL	

BIII No .1- PRELIMINARY AND GENERALS			BoQ			
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Kshs)	AMOUNT (Kshs)	
1.1	Contractor's Camp					
1.2.1	Provide for establishment, mobilisation and demobilisation of the Contractor's camp together with all the required equipments	LS	1			
1.3	Concrete Strength Tests					
1.3.1	Concrete Strength tests (six cubes / test) as per the relevant specifications.	Lump Sum	10			
1.4	Signboards					
1.4.1	Provision, erection and maintenance of project signboards as per the drawings and as directed by the Engineer.	No.	4			
1.6	Marker Posts					
1.6.1	Excavate for include for supply and fixing of indicator posts for water main route, road crossings, change of direction, air valves, washouts, and valve chambers.	Nr	100			
1.7	Testing and commissioning of the works					
1.7.1	Operate completed project for 15 days prior to handing over including all costs.	Days	15			
1.8	Other Works, Obligations					
1.8.1	The Contractor shall describe in detail hereunder other works, obligations and things which may be referred to in the Specifications or which he may consider have been omitted from the Bills of Quantities and for which he desires to enter a separate charge (the charge to be carried direct to the amount column). FULL DESCRIPTION OF ITEM(S) OF WORK OR ANY OTHER ISSUE SHOULD BE MADE. If no separate charge is made hereunder, the rates in the Bills of Quantities will be held as covering all expenses for all such works					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
2.1	REHABILITAYION WORKS				
2.1.1	Disilting of the intake works	Lump Sum	1		
2.1.2	Provide all materials and repair Brocken concrete wall of the intake chamber	Lump Sum	1		
2.1.3	Provide and install lockable chequered MS cover plates 6mm thick complete with frames/hinges/locks as shown in the drawings and directed by the Engineer	m²	2.64		
2.2	WATER METER				
	Provide all materials and construct complete meter chamber as specified/shown in the drawings. Rates to include for all thrust blocks and pipe supports.	No.	1		
2.2.1	Supply all fittings and install a 300mm dia double flanged water meter as instructed by the Engineer.	No.	1		
2.2.2	Lockable manhole cover for sluice valve chamber	No.	1		
2.3	Guard rails				
2.3.1	Provide and install steel guard rails as specified in the drawings	Lumpsum	1		

Bill No. 3	3 - Conveyance Pipeline	1			
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
3.1	Excavation and Backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom, providing bedding materials and surround and reinstatement of the site.				
3.1.1	Excavation and backfilling in normal material for Dia 300 mm GI pipe for depth not exceeding 1.5 m	m ³	240		
3.1.2	Excavation and backfilling in trench hard rock material for Dia 300 mm GI pipe for depth not exceeding 1.5 m	m ³	24		
3.1.3	Excavation and backfilling in normal material for Dia 250 mm uPVC pipe for depth not exceeding 1.5 m	m ³	208		
3.1.4	Excavation and backfilling in trench loose hard rock material for Dia 250 mm uPVC pipe for depth not exceeding 1.5 m	m ³	21		
3.2	uPVC Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.				
Total ca	rried to next page		· · ·		

Total ca					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)

	Pipe Class Working			
	Pressure (m)			
	B (PN 6) 60			
	C (PN 8)			
	80			
	C (PN 10)			
	100 D (DN 12 5)			
	D (PN 12.5) 125			
	E (PN 16)			
	160			
	STRAIGHTS			
	GI Straights			
3.2.1	300 mm dia	m	300	
	uPVC Straights			
3.2.2	250 mm dia	m	260	
3.3	PIPE FITTINGS			
	GI Bends			
	Vertical Bends			
	300 mm dia			
3.3.1	45 deg	No.	4	
3.3.2	22.5 deg	No.	4	
3.3.3	11.25 deg	No.	6	
	uPVC Bends			
	Vertical Bends			
	250 mm dia			
3.3.4	45 deg	No.	1	
3.3.5	22.5 deg	No.	2	
3.3.6	11.25 deg	No.	19	
SUB-TOT	AL CARRIED FORWARD TO NEXT PAGE			

SUB-TOT				
	Couplers			

3.3.7	315/300 mm dia uPVC/GI stepped coupling	No.	2]
3.3.8	250/250 dia uPVC/GI stepped coupling	No.	1	
3.4	AIR VALVES			
3.4.1	Excavate, provide all materials and construct complete inspection valve chambers of internal dimensions 1000 x 1000 x 1000 mm at the pipe junctions. Rates to including for thrust blocks and pipe supports as shown in the drawings.	No.	4	
	Provide, handle, install and test the following steel and uPVC pipes and fittings and valves. Rates shall include for completing all pipe jointings as per the specifications.			
3.4.2	2 No. Double Air Valves (DAVs) at Chainages 0+580m and 1+980m (300 mm Dia)			
3.4.2.1	315/300 mm dia uPVC/Steel stepped coupling	No.	4	
3.4.2.2	300 mm dia x 0.5 m single flanged GI pipe	No.	4	
3.4.2.3	300 mm x 50 mm double flanged Gl tee	No.	2	
3.4.2.4	50 mm dia x 0.4 m long double flanged GI pipe	No.	2	
3.4.2.5	50 mm flanged gate valve	No.	2	
3.4.2.6	50 mm double orifice air valve	No.	2	
3.4.3	2 No. Double Air Valves (DAVs) at Chainages 2+920 and 3+675m (250 mm Dia)			
3.4.3.1	250/250 mm dia PVC U/GI stepped coupling	No.	4	
Total car	rried forward to next page			

Total ca					
3.4.3.2	250 mm dia x 0.5 m single flanged				
	GI pipe	No.	4		

3.4.3.3	250 mm x 50 mm double flanged GI tee	No.	2	
3.4.3.4	50 mm dia x 0.4 m long double flanged GI pipe	No.	2	
3.4.3.5	50 mm flanged gate valve	No.	2	
3.4.3.6	50 mm double orifice air valve	No.	2	
3.5	WASHOUTS			
3.5.1	Excavate, provide all materials and construct complete w/o chambers of internal dimensions 1500 x 1500 x 1200 mm. Rates to including thrust blocks and pipe supports as shown in the drawings.	No.	4	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and drawings			
3.5.2	2 No. Washout Fittings at chainages shown in the drawings (CH. 0+175 and 0+750 m) (300 mm Dia)			
3.5.2.1	300/300 dia GI/steel stepped coupling	No.	2	
3.5.2.2	300 mm dia x 0.5m single flanged Gl pipe	No.	2	
3.5.2.3	300 mm x 80mm dia level invert scour GI tee with flanged branch	No.	2	
3.5.2.4	80 mm dia flanged gate valve	No.	2	
3.5.2.5	80 mm dia x 0.5m single flanged GI pipe	No.	4	
3.5.2.6	80/90mm dia PVC-U/ GI adaptor	No.	4	
Total car	ried forward to next page			

Total ca	rried forward from previous page			
3.5.2.7	90 mm dia long uPVC pipe	m	24	

3.5.2.8	80mm GI threaded pipe 500 mm long with a flap valve	No.	2	
		110.	<u> </u>	
3.5.3	2 No. Washout Fittings at chainages shown in the drawings (CH. 2+125, 4+075m) (250 mm Dia)			
3.5.3.1	250/250 dia PVC-u/steel stepped coupling	No.	2	
3.5.3.2	300 mm dia x 0.5m single flanged GI pipe	No.	2	
3.5.3.3	250 mm x 80 mm dia level invert scour GI tee with flanged branch	No.	2	
3.5.3.4	80 mm dia flanged gate valve	No.	2	
3.5.3.5	80 mm dia x 0.5m single flanged GI pipe	No.	4	
3.5.3.6	80/90mm dia PVC-U/ GI adaptor	No.	4	
3.5.3.7	90 mm dia long uPVC pipe	m	24	
3.5.3.8	80 mm GI threaded pipe 500 mm long with a flap valve	No.	2	
3.6	SECTION VALVE CHAMBERS			
3.6.1	Excavate, provide all materials and construct complete inspection valve chambers of internal dimensions 1200 x 1200 x 1200 mm at the pipe junctions. Rates to including thrust blocks, pipe supports as shown in the drawings.	No.	2	
	rried forward to next page			
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Total carried from previous page

3.6.3 Total car	2 Offtakes at Chainage 5+053 m (1.5mx1.5m) rried forward to next page			
	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE Block Chamber for Branch 1 and			
	SUB-TOTAL CARRIED FORWARD TO NEXT PAGE			
3.6.2.13	250/160 mm GI / PVC-U flanged stepped coupling, double flanged	No.	1	
3.6.2.12	160 mm dia double flanged sluice valve	No.	1	
3.6.2.11	300 mm x 250 mm dia all flanged tee	No.	1	
3.6.2.10	150/160 GI/uPVC double flanged adaptor	No	1	
3.6.2.9	160/160 dia PVC-u/steel adaptor single flanged	No	1	
3.6.2.8	160mm dia double flanged GI pipe (0.5m long)	No	1	
3.6.2.7	300mm x 250mm x 160mm GI tee	No	1	
3.6.2.6	250mm diameter sluice valeve	No	1	
3.6.2.2	250 mm dia double flanged GI pipe (0.5 m long)	No.	1	
3.6.2.1	250/250 dia PVC-u/steel adaptor single flanged	No.	2	
3.6.2	Block Chamber for Mithakwa Offtake at Ch. 1+578 m (1.5m x 1.5m)			
	Provide, handle, install and test the following steel, uPVC pipes and fittings, valves and water meter in the pipeline junction chambers to the satisfaction of the Engineer. Rates shall include for completing all pipe joints and testing as specified.			

Total carried from previous page

3.6.3.1	250/250 mm dia PVC-U / GI stepped coupling	No.	2	
3.6.3.2	250 mm dia single flanged GI pipe (0.5 m long)	No.	3	
3.6.3.3	250 mm x 200 mm dia all flanged tee	No.	1	
3.6.3.4	200 mm dia double flanged sluice valve	No.	2	
3.6.3.5	250 mm dia double flanged sluice valve	No.	2	
3.6.3.6	150/160 mm GI / PVC-U stepped coupling	No.	1	
3.7	ROAD CROSSINGS FOR PIPES			
3.7.1	Provide for major road crossings as per drawings and in accordance with specifications. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings as per the specifications.	No.	2	
TOTAL CA	ARRIED OVER TO GRAND SUMMARY			

	BILL NO. 5 - BRANCH PIPELINES				
ITEM NO.	DESCRIPTION	AMOUNT (Ksh)			
	COLLECTION				
1	Bill No.4.1 Mithakwa Branch Pipeline				
2	Bill No.4.2 Branch 1 Pipeline				
3	Bill No.4.3 Branch 2 Pipeline				
	TOTAL CARRIED OVER TO GRAND SUMMARY				

Bill No. 4.	1 - Thengeini -Kamwangi Sub-main Pip	eline		<u>г т</u>	
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
4.11	Excavation and Backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m unless otherwise specified				
4.11.1	Excavation in normal soil	m ³	1,075		
4.11.2	Ditto for excavation in loose hard rock	m ³	108		
4.12	uPVC Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.				
	Class Working Pressure (m)				
	B 60 C 100				
	C 100 D 125				
	E 160				
4.12.1	uPVC Straights				
	Class B				
4.12.1.1	Dia 160 mm	m	2,443		
Total carr	ied forward to next page				

Total fron	n previous page			
4.13	AIR VALVES			
4.13.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	3	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.			
	Double Air Valve (DAV) at Chainage 1+497m			
4.13.2	160 / 150 mm dia V/J stepped coupling	No.	6	
4.13.3	150 mm dia single flanged GI piece (0.5 m long)	No.	6	
4.13.4	150 x 50 mm dia all flanged tee	No.	3	
4.13.5	50 mm x 400mm long double flanged steel piece	No.	3	
4.13.6	50 mm flanged gate valve	No.	3	
4.13.7	50 mm dia Double orifice air valve	No.	3	
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4.14	Washouts			
4.14.1	Excavate for, provide all materials and construct complete w/o chambers of internal dimensions 1200 x 1200 x 1200 mm. Rates to including thrust blocks, pipe supports as shown in the drawings.	No	1	
	Provide, handle, install and test the			
	following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and detailed drawings.			
	For Wook Out at branch 4 Chainens			
	For Wash Out at branch 1 Chainage 1+479m			
4.14.2	160 / 150 mm dia V/J stepped coupling	No.	2	
4.14.3	150 mm dia single flanged steel spigot (0.5 m long)	No.	2	
	150 x 80 mm dia Level invert scour tee			
4.14.4	with flanged branch	No.	1	
4.14.5	80 mm dia flanged gate valve	No.	1	
	80mm, 0.5m long single flanged GI			
4.14.6	piece	No.	1	
4.14.7	90 / 80 mm dia uPVC/GI adaptor	No.	2	
4.14.8	90 mm dia uPVC pipe	m	6	
4.14.9	80mm dia 0.5 m long with flap valve	No	1	
	ried forward to next page		1	

4.15	JUNCTION VALVE CHAMBERS			
4.14.1.	Excavate for, provide all materials and construct complete inspection valve chambers of internal dimensions 1000 x750x 1200 mm at the pipe junctions. Rates to including thrust blocks, pipe supports as shown in the drawings.	No.	4	
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (Section valve chambers).			
	Rates shall include for completing all pipe joints as specified in the specifications and detailed drawings.			
	Upper Thenge-ini Offtake at Ch.1519m			
4.15.2	160 / 150 mm dia V/J stepped coupling	No	2	
4.15.3	150 mm dia single flanged steel spigot (0.5 m long)	No	2	
4.15.4	150 x 100 mm dia all flanged tee	No	1	
4.15.5	100 mm , 0.5m long double flanged GI piece	No	1	
4.15.6	100 mm flanged sluice valve	No	1	
4.15.7	100mm , 0.5m long single flanged GI piece	No	1	
4.15.8	100 / 110 mm dia V/J stepped coupling	No	1	
	Lower Thenge-ini Offtake at Ch.1519m			
4.15.9	160 / 150 mm dia V/J stepped coupling	No	2	

n previous page				
150 mm dia single flanged steel spigot (0.5 m long)	No	2		
150 x 100 mm dia all flanged tee	No	1		
100 mm , 0.5m long double flanged GI piece	No	1		
100 mm flanged sluice valve	No	1		
100mm , 0.5m long single flanged GI piece	No	1		
100 / 110 mm dia V/J stepped coupling	No	1		
Kahuho Distribution Offtake at Ch. 1+519m				
160 / 150 mm dia V/J stepped coupling	No	3		
150 mm dia single flanged steel spigot (0.5 m long)	No	3		
150 x 150 mm dia all flanged tee	No	1		
150 mm , 0.5m long double flanged GI piece	No	1		
150 mm flanged sluice valve	No	2		
10 No offtakes to Farms				
110 x 32 mm dia saddle clamp (mild steel)	No.	10		
40 /32 mm dia GI / uPVC adaptor	No	30		
40 mm dia uPVC pipe	m	10		
32 mm, 0.5m long, threaded steel pipe	No	20		
	(0.5 m long) 150 x 100 mm dia all flanged tee 100 mm , 0.5m long double flanged GI piece 100 mm flanged sluice valve 100 mm , 0.5m long single flanged GI piece 100 / 110 mm dia V/J stepped coupling Kahuho Distribution Offtake at Ch. 1+519m 160 / 150 mm dia V/J stepped coupling 150 mm dia single flanged steel spigot (0.5 m long) 150 x 150 mm dia all flanged tee 150 mm , 0.5m long double flanged GI piece 150 mm dia single flanged steel spigot (0.5 m long) 150 x 150 mm dia all flanged tee 150 mm , 0.5m long double flanged GI piece 110 x 32 mm dia saddle clamp (mild steel) 40 /32 mm dia GI / uPVC adaptor 40 mm dia uPVC pipe	150 mm dia single flanged steel spigot (0.5 m long) No 150 x 100 mm dia all flanged tee No 100 mm , 0.5m long double flanged GI piece No 100 mm flanged sluice valve No 100 mm flanged sluice valve No 100 mm dia V/J stepped coupling No 100 / 110 mm dia V/J stepped coupling No 160 / 150 mm dia V/J stepped coupling No 150 x 150 mm dia single flanged steel spigot (0.5 m long) No 150 x 150 mm dia all flanged tee No 150 mm flanged sluice valve No 150 mm flanged sluice valve No 150 mm dia single flanged steel spigot (0.5 m long) No 150 mm flanged sluice valve No 10 No offtakes to Farms	150 mm dia single flanged steel spigot (0.5 m long) No 2 150 x 100 mm dia all flanged tee No 1 100 mm , 0.5m long double flanged GI piece No 1 100 mm flanged sluice valve No 1 100 / 110 mm dia V/J stepped coupling No 1 160 / 150 mm dia V/J stepped coupling No 3 150 mm dia single flanged steel spigot (0.5 m long) No 3 150 x 150 mm dia all flanged tee No 1 150 mm , 0.5m long double flanged GI piece No 1 150 mm , 0.5m long double flanged GI piece No 1 150 mm flanged sluice valve No 1 150 mm flanged sluice valve No 2 10 No offtakes to Farms	150 mm dia single flanged steel spigot (0.5 m long)No2150 x 100 mm dia all flanged teeNo1100 mm , 0.5m long double flanged GI pieceNo1100 mm flanged sluice valveNo1100 / 110 mm dia V/J stepped couplingNo1160 / 150 mm dia single flanged Steel spigot (0.5 m long)No3150 x 150 mm dia all flanged teeNo1150 mm flanged sluice valveNo1150 mm dia single flanged GI pieceNo1150 mm dia single flanged steel spigot (0.5 m long)No3150 mm dia single flanged teeNo1150 mm flanged sluice valveNo2150 mm flanged sluice valveNo210 No offtakes to Farms10100 / 32 mm dia GI / uPVC adaptorNo3040 mm dia uPVC pipem10

4.15.25	32 mm dia gate valve	No	10	
4.15.26	32 mm dia GI Nipple	No	10	
4.15.27	32 mm dia GI union	No	10	
	_			
4.16	Bends			
	11.25 degrees			
4.16.1	160 mm dia	No.	4	
	22.5 degrees			
44.00	100			
4.16.2	160 mm dia	No.	5	
	45 degrees			
4.16.3	160 mm dia	No.	1	
	90 degrees			
4.16.4	160 mm dia	No.	1	
4.10.4		NU.	1	
TOTAL CAR	RRIED OVER TO COLLECTION SHEET			

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
4.2.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
4.2.1.1	Excavation in normal soil	m ³	1,193		
4.2.1.2	Ditto for excavation in loose hard rock	m ³	119		
4.2.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06- 149 Part 2:2000.				
	Class Working Pressure (m)				
	B 60				
	C 100				
	D 125				
	E 160				

Total fro	m previous page			
4.2.3	uPVC Straights			
	PN6			
4.2.3.1	Dia 250 mm	m	878	
4.2.3.2	Dia 140mm	m	977	
4.2.3.3	Dia 110 mm	m	857	
	End Cap			
4.2.3.4	110mm dia end cap	No	2	
4.2.4	Washouts			
4.2.4.1	Excavate for, provide all materials and construct complete w/o chambers of internal dimensions 1200 x 1200 x 1200 mm. Rates to including thrust blocks, pipe supports as shown in the drawings.	No	1	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and detailed drawings.			
	Provide, lay, joint and test the following fittings for Wash Outs			
	For W/O at chainage 2+250m			
4.2.4.2	250mm diameter uPVC/GI adaptor	No	2	
Total ca	rried forward to next page			

Total fro	m previous page			
4.2.4.3	250mm diameter by 50mm all flanged invert scour Tee	No	1	
4.2.4.4	50mm dia 0.5m long double flanged GI pipe	No	1	
4.2.4.5	50mm diameter double flanged flap valve	No	1	
4.2.4.6	50mm dia, 4m long flanged GI pipe	m	4	
4.2.4.7	50mm dia uPVC/GI adopter	No	1	
4.2.5	AIR VALVES			
4.2.5.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks, pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	2	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.			
	1 No. Double Air Valve (DAV) at branch 1 Ch. 0+508 m			
4.2.4.2	250mm diameter uPVC/GI adaptor	No	4	
4.2.5.3	250 x 50 mm double flanged steel tee	No.	2	
4.2.5.4	50 mm x 400mm long double flanged steel piece	No.	2	
4.2.5.5	50 mm flanged gate valve	No.	2	
4.2.5.6	50 mm dia Double orifice air valve	No.	2	
Total ca	irried to next page			

Total fro							
4.2.6	SECTION VALVE CHAMBERS						
4.2.6.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	5				
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications						
	Offtake to Turu-ini Distribution Main at Ch.0+450m						
4.2.6.2	250 x 250 x 200mm GI all flanged Tee	No	1				
4.2.6.3	200mm dia uPVC/GI double flanged adaptor	No	8				
4.2.6.4	200mm dia double flanged sluice valve	No	4				
4.2.6.5	200mm dia 0.5m long double flanged steel pipe	No	8				
4.2.6.6	250mm dia uPVC/GI adaptor	No	2				
4.2.6.7	250mm dia 0.5m long double flanged GI pipe	No	2				
4.2.6.8	250mm dia sluice valve	No	1				
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4.2.6.25	100 x 75 flanged reducer	No	1	
4.2.6.26	75 / 75 mm dia V/J stepped coupling	No.	1	
4.2.6.27	1No Junction Chamber Offtake to Kathakwa pipelines			
4.2.6.28	75 / 75 mm dia V/J stepped coupling	No.	2	
4.2.6.29	75 mm, 0.5m long single flanged steel pipe	No.	2	
4.2.6.30	75 x 50 mm all flanged steel tee	No.	1	
4.2.6.31	50 mm , 0.5m long double flanged GI piece	No.	1	
4.2.6.32	40 mm flanged gate valve	No.	1	
4.2.6.33	50 / 40 mm dia V/J stepped coupling	No.	1	
4.2.6.34	75 mm, 0.5m long single flanged steel pipe	No.	2	
4.2.6.35	75 / 75 mm dia V/J stepped coupling	No.	2	
4.2.7	Bends			
	250 mm dia			
4.2.7.1	11.25 deg	No.	5	
4.2.7.2	22.5° bends	No.	2	
	250 mm dia			
4.2.7.3	11.25° bends	No.	2	
4.2.8	Road Crossings			
4.2.8.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	1	
TOTAL C	CARRIED OVER TO COLLECTION S	HEET		

Bill No. 4.3 - Branch 2 Pipeline Karime route						
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)	
4.3.1	Excavation and backfilling					
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.					
4.3.1.1	Excavation in normal soil	m ³	3,804			
4.3.1.2	Ditto for excavation in loose hard rock	m ³	380			
4.3.2	Pipe work					
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.					
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS- 06-149 Part 2:2000.					
	Class Working Pressure (m) B 60					
	C 100					
	D 125 E 160					
	uPVC Straights					
	-					
	PN6					
Total ca	rried to next page					

Total fro	Total from previous page										
4.3.2.1	Dia 250 mm	m	3,298.89								
	PN8										
4.3.2.3	Dia 250 mm	m	3,031.39								
	PN10										
4.3.2.4	Dia 250 mm	m	585.51								
4.3.3	Washouts										
4.3.3.1	Excavate for, provide all materials and construct complete w/o chambers of internal dimensions 1200 x 1200 x 1200 mm. Rates to including thrust blocks, pipe supports as shown in the drawings.	No	2								
	SUB-TOTAL CARRIED FORWARD TO NEXT PAGE										
	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE										
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and detailed drawings.										
	Provide, lay, joint and test the following fittings for Wash Outs										
	For Wash Out at branch 1 Chainage 2680m										
4.3.3.2	250 / 250 mm dia V/J stepped coupling	No.	4								
Total ca	rried to next page				Total carried to next page						

Total fro	m previous page						
4.3.3.3	250 mm dia single flanged steel spigot (0.5 m long)	No.	4				
4.3.3.4	250 x 80 mm dia Level invert scour tee with flanged branch	No.	2				
4.3.3.5	80 mm dia flanged gate valve	No.	2				
4.3.3.6	80mm , 0.5m long single flanged GI piece	No.	2				
4.3.3.7	90 / 80 mm dia uPVC/GI adaptor	No.	4				
4.3.3.8	90 mm dia uPVC pipe	m	6				
4.3.3.9	80mm dia 0.5 m long with flap valve	No	2				
4.3.4	AIR VALVES						
4.3.4.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	5				
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.						
	4 No. Double Air Valve (DAVs) 0n branch 2						
4.3.4.2	250 / 250 mm dia V/J stepped coupling	No.	10				
4.3.4.3	250 mm dia single flanged GI pipe (500mm)	No.	10				
4.3.4.4	250 x 80 mm dia all flanged tee	No.	5				
Total ca	Total carried forward to next page						

Total from	n previous page				
4.3.4.5	80x50mm dia flanged reducer	No.	5		
4.3.4.6	50 mm flanged gate valve	No.	5		
	50 mm x 400 mm long double flanged spigot	No.	5		
	50 mm dia Double orifice air valve	No.	5		
4.3.5	SECTION VALVE CHAMBERS				
4.3.5.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	3		
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications				
	Offtake to Israel Pipeline				
4.3.5/	250 / 250 mm dia V/J stepped coupling	No	1		
	250 mm dia single flanged steel spigot (0.5 m long)	No	2		
4.3.3.4	250 x 150 mm dia all flanged tee	No	1		
1 4 5 5	150 mm dia double flanged sluice valve	No	1		
	150 mm dia single flanged GI piece (0.5 m long)	No	1		
Total car	ried to next page		1	1	

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4.3.5.7	140 / 150 mm dia VJ stepped coupling	No	1		
4.3.5.8	250 / 200 mm dia flanged reducer	No	1		
4.3.5.9	200 / 200 mm dia V/J stepped coupling	No	1		
4.3.5.10	200 mm dia single flanged steel spigot (0.5 m long)	No	1		
	Offtake to Mitero Distribution Main at Ch. 1+914m				
4.3.5.11	160 / 150 mm dia V/J stepped coupling	No	1		
4.3.5.12	150 mm dia single flanged steel spigot (0.5 m long)	No	1		
4.3.5.13	150 x 100 mm dia all flanged tee	No	1		
4.3.5.14	100 mm , 0.5m long double flanged GI piece	No	1		
4.3.5.15	100 mm flanged sluice valve	No	2		
4.3.5.16	100mm , 0.5m long single flanged GI piece	No	2		
4.3.5.17	100 / 110 mm dia V/J stepped coupling	No	2		
4.3.5.18	150 x 100 flanged reducer	No	1		
TOTAL CARRIED FORWARD to next page					

Total from previous page						
	Offtakes to farms					
4.3.5.19	250 x 32 mm dia saddle clamp (mild steel)	No.	1			
4.3.5.20	40 /32 mm dia GI / uPVC adaptor	No	3			
4.3.5.21	40 mm dia uPVC pipe	m	1			
4.3.5.22	32 mm, 0.5m long, threaded steel pipe	No	2			
4.3.5.23	32 mm dia gate valve	No	1			
4.3.5.24	32 mm dia GI Nipple	No	1			
4.3.5.25	32 mm dia GI union	No	1			
	Offtakes to farms					
4.3.5.26	200 x 32 mm dia saddle clamp (mild steel)	No.	1			
4.3.5.27	40 /32 mm dia GI / uPVC adaptor	No	3			
4.3.5.28	40 mm dia uPVC pipe	m	1			
4.3.5.29	32 mm, 0.5m long, threaded steel pipe	No	2			
4.3.5.30	32 mm dia gate valve	No	1			
4.3.5.31	32 mm dia GI Nipple	No	1			
4.3.5.32	32 mm dia GI union	No	1			
4.3.6	Bends					
	250 mm dia					
4.3.6.1	11.25 deg	No.	1			
Total car	Total carried to next page					

Total fro	m previous page		1			
4.3.6.2	22.5° bends	No.	1			
	200 mm dia					
4.3.6.3	22.5° bends	No.	2			
4.3.6.4	11.25 deg	No.	4			
	160 mm dia					
4.3.6.5	11.25° bends	No.	2			
4.3.7	Road Crossings					
4.3.7.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2			
TOTAL (TOTAL CARRIED OVER TO COLLECTION SHEET					

	Bill No.5 - DISTRIBUTION PIPELINES	
ITEM NO.	DESCRIPTION	AMOUNT (Ksh)
	COLLECTION	
1	Bill No. 5.1: Upper Thenge-ini Distribution	
2	Bill No. 5.2: Lower Thenge-ini Distribution	
3	Bill No. 5.3: Kahuho Distribution	
4	Bill No. 5.4: Turu-ini Distribution	
5	Bill No. 5.5: Gichagi Distribution	
6	Bill No. 5.6: Gitaimbuka Distribution	
7	Bill No. 5.7: Gathakwa Distribution	
8	Bill No. 5.8: Israel Distribution	
9	Bill No. 5.9: Mitero Distribution	
10	Bill No 5.10: Mitero/Gikindu	
11	Bill No 5.11: Mithakwaini Distribution line	
12	Bill No 5.12: Kagwathi Distribution line	
	TOTAL CARRIED OVER TO GRAND SUMMARY	

Bill No. 5.1 Upper Thenge-ini Distribution Pipeline						
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)	
5.1.1	Excavation and backfilling					
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.					
5.1.1.1	Excavation and backfilling in normal material for pipes for depth n.e 1 m	m ³	451			
5.1.1.2	Ditto for excavation in loose hard rock	m ³	45			
5.1.2	uPVC Pipe work					
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchor/thrust blocks.					
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.					
	Class Working Pressure (m)					
	PN6 PN8					
	PN10					
	Pn12					
	uPVC Straights					
	PN10					
5.1.2.1	Dia 110 mm	m	821			
Total car	ried forward to next page					

Total fron					
	Fittings				
	Provide, lay, joint and test uPVC Fittings				
	Reducers				
5.1.2.2	50 x 25 mm	No.	1		
	BENDS				
	Horizontal bends				
	11.25 degrees				
5.1.2.3	50 mm dia	No.	3		
	45 degrees				
5.1.2.4	50 mm dia	No.	1		
	90 degrees				
5.1.2.5	50 mm dia	No.	3		
5.1.3	JUNCTION CHAMBERS				
5.1.3.1	Excavate for, provide all materials and construct complete valve chambers. Internal dimensions 600 x 600 x 600 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No.	4		
	Block Chamber at chainage 376 m Offtake				
5.1.3.2	110 / 80 mm dia V/J stepped couplings	No.	2		
5.1.3.3	80 mm dia single flanged steel spigot (0.5m long)	No.	2		
5.1.3.4	80 x 40 mm double flanged steel tee	No.	1		
5.1.3.5	40 mm, 0.5m long threaded steel pipe	No.	2		
SUB-TOTA	L CARRIED FORWARD TO PREVIOUS PAG	E	ł	ł	

Total from previous page					
5.1.3.6	40 mm dia GI union	No.	1		
5.1.3.7	40 mm dia GI Nipple	No.	1		
5.1.3.8	40 mm dia gate valve	No.	1		
5.1.3.9	50 / 40 mm dia uPVC / GI adaptor	No.	1		
	Block Chambers				
5.1.3.10	50 / 50 mm dia GI / uPVC adaptor	No.	6		
5.1.3.11	50 mm dia GI piece 500 mm long with threads	No.	6		
5.1.3.12	50 mm x 25mm dia socketed GI tee	No.	3		
5.1.3.13	25 mm, 0.5m long threaded steel pipe	No.	6		
5.1.3.14	25 mm dia GI union	No.	3		
5.1.3.15	25 mm dia GI nipple	No.	3		
5.1.3.16	25 mm dia gate valve	No.	3		
5.1.3.17	32 / 25 mm dia GI / uPVC adaptor	No.	3		
	Saddle clamps				
5.1.3.18	50 mm x 20 mm dia	No.	5		
5.1.3.19	25 mm x 20 mm dia	No.	4		
TOTAL CAP	TOTAL CARRIED OVER TO COLLECTION SHEET				

	ill No. 5.2 Lower Thenge-ini Distribution Pipeli			RATE	AMOUNT
ITEM	DESCRIPTION	UNIT	QUANTITY	(Ksh)	(Ksh)
5.2.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.2.1.1	Excavation and backfilling in normal material for pipes for depth n.e 1 m	m ³	404		
5.2.1.2	Ditto for excavation in loose hard rock	m ³	40		
5.2.2	uPVC Pipe workProvide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchor/thrust blocks.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.				
	Class Working Pressure (m)				
	B 60 C 100 D 25 E 160				
	uPVC Straights				
	PN10				
5.2.2.1	Dia 110 mm	m	735		
	Fittings				
5.2.2.2	Provide, lay, joint and test Fittings				

Total from	previous page	1		1	
	End cap				
5.2.2.3	110 mm	No.	1		
	BENDS				
	11.25 degrees				
5.2.2.4	110 mm dia	No.	2		
	22.5 degrees				
5.2.2.5	110 mm dia	No.	3		
5.2.3	JUNCTION CHAMBERS				
5.2.3.1	Excavate for, provide all materials and construct complete valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No.	13		
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (Section valve chambers).				
	Rates shall include for completing all pipe joints as specified in the specifications and detailed drawings.				
	Block Chamber at 13 No. Locations				
5.2.3.2	50 / 50 mm dia GI / uPVC adaptor	No.	22		
5.2.3.3	50 mm dia GI piece 500 mm long with threads	No.	22		
5.2.3.4	50 mm x 25mm dia socketed GI tee	No.	11		
5.2.3.5	25 mm, 0.5m long threaded steel pipe	No.	22		
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5.2.3.6	25 mm dia GI union	No.	11		
5.2.3.7	25 mm dia GI nipple	No.	11		
5.2.3.8	25 mm dia gate valve	No.	11		
5.2.3.9	32 / 25 mm dia GI / uPVC adaptor	No.	11		
	Saddle clamps				
5.2.3.10	50 x 25 mm dia saddle clamp	No.	2		
5.2.3.11	25 mm dia GI union	No.	2		
5.2.3.12	25 mm dia GI nipple	No.	2		
5.2.3.13	25 mm dia gate valve	No.	2		
5.2.3.14	32 / 25 mm dia GI / uPVC adaptor	No.	2		
TOTAL CARE					

Bill No. 5	3.3 Kahuho Distribution Line				
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.3.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.3.1.1	Excavation in normal soil	m ³	485		
5.3.1.2	Ditto for excavation in loose hard rock	m ³	49		
5.3.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS- 06-149 Part 2:2000.				
	Class Working Pressure (m)				
	PN6				
	PN8 PN10				
	PN12				
	uPVC Straights				
	PN6				
5.3.2.1	Dia110 mm	m	882		
Total car	ried to next page				

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	BENDS			
	90 degrees			
5.3.2.3	250 mm dia	No.	3	
	45 degrees			
5.3.2.4	250 mm dia	No.	2	
	22 degrees			
5.3.2.5	250 mm dia	No.	2	
5.3.2.6	250 mm dia	No.	2	
5.3.3	AIR VALVES			
5.3.3.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	1	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.			
	Double Air Valve (DAV) at Chainage 0+316m			
5.3.3.2	250mm uPVC/GI adaptor double flanged	No.	2	
5.3.3.3	250 x 50 mm double flanged steel tee	No.	1	
5.3.3.4	50 mm x 400mm long double flanged steel piece	No.	1	
5.3.3.5	50 mm flanged gate valve	No.	1	
Total ca	rried to next page			

Total fro	m previous page		1		
5.3.3.6	50 mm dia Double orifice air valve	No.	1		
5.3.4	JUNCTION CHAMBERS				
5.3.4.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	3		
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications				
	2No. Block Chamber at chainage				
5.3.4.2	250mm x 250mm x 250mm all flanged GI tee	No	1		
5.3.4.3	250mm uPVC/GI adaptor	No	3		
5.3.4.4	250mm dia, 0.5m long doudle flanged GI spigot	No	6		
5.3.4.5	250mm dia double flanged sluice valve	No	3		
TOTAL C	CARRIED FORWARD TO NEXT PA	GE	1	L	

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	1No. Block Chamber at chainage 0+824m				
5.3.4.6	125 / 125 mm dia V/J stepped couplings	No.	1		
5.3.4.7	125 mm dia single flanged GI piece (0.5 m long)	No.	1		
5.3.4.8	125 x 50 mm all flanged steel tee	No.	1		
5.3.4.9	50 mm dia double flanged steel pipe (0.5m long)	No.	1		
5.3.4.10	50 mm flanged sluice valve	No.	1		
5.3.4.11	50 mm dia single flanged steel pipe (0.5m long)	No.	1		
5.3.4.12	63 / 50 mm dia VJ stepped coupling	No.	1		
5.3.4.13	125 x 100 mm dia flanged reducer	No.	1		
5.3.4.14	100 mm dia single flanged steel spigot (0.5m long)	No.	1		
5.3.4.15	100 / 110 mm dia V/J stepped couplings	No.	1		
	Block Chambers to 30No. offtakes to farms				
5.3.4.16	63 / 50 mm dia GI / uPVC adaptor	No.	60		
5.3.4.17	50 mm dia GI piece 500 mm long with threads	No.	60		
5.3.4.18	50 mm x 25mm dia socketed GI tee	No.	30		
5.3.4.19	25 mm, 0.5m long threaded steel pipe	No.	60		
5.3.4.20	25 mm dia GI union	No.	30		
5.3.4.21	25 mm dia GI nipple	No.	30		
Total car	rried to next page				

Total fro	m previous page			
5.3.4.22	25 mm dia gate valve	No.	30	
5.3.4.23	32 / 25 mm dia GI / uPVC adaptor	No.	30	
	Saddle clamps			
5.3.4.24	140 x 20 mm dia saddle clamp	No.	20	
	Adaptors			
5.3.4.25	25 / 20 mm dia GI / uPVC adaptor	No.	20	
	20N0. Block Chamber to Offtakes			
5.3.4.26	50 x 20 mm dia saddle clamp	No.	60	
5.3.4.27	20 / 25 mm dia uPVC / GI adaptor	No.	180	
5.3.4.28	25 mm dia, 1m long, uPVC pipe	No.	60	
5.3.4.29	20 mm, 0.5m long threaded steel pipe	No.	120	
5.3.4.30	20 mm dia GI union	No.	60	
5.3.4.31	20 mm dia GI nipple	No.	60	
5.3.4.32	20 mm dia gate valve	No.	60	
5.3.5	Road Crossings			
5.3.5.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2	
TOTAL C	CARRIED OVER TO COLLECTION	SHEET	1	

Bill No. 5	5.4 Turu-ini Distribution Pipeline	1		1	
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.4.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.4.1.1	Excavation in normal soil	m ³	693.00	200.00	138,600
5.4.1.2	Ditto for excavation in loose hard rock	m ³	70.00	1,800.00	126,000
5.4.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.				
	Class Working Pressure (m)				
	PN6 PN8				
	PN10				
	PN12				
	uPVC Straights				
	PN6				
5.4.2.1	Dia 200 mm	m	1,260.00		
Total ca	rried to next page	1		<u> </u>	

Total fro	m previous page		I	I	
	BENDS				
	22 degrees				
5.4.2.2	200 mm dia	No.	2.00		
	11.25 degrees				
5.4.2.3	200 mm dia	No.	2.00		
5.4.3	AIR VALVES				
5.4.3.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	1.00		
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.				
	Double Air Valve (DAV) at Chainage 0+250m				
5.4.3.2	200mm x 200mm dia uPVC/GI adaptor	No.	2.00		
5.4.3.3	200 mm x 500 mm long Double flanged steel spigot	No.	2.00		
5.4.3.4	200 x 50 mm all flanged steel tee	No.	1.00		
5.4.3.5	50 mm x 400mm long double flanged steel piece	No.	1.00		
5.4.3.6	50 mm flanged gate valve	No.	1.00		
5.4.3.7	50 mm dia Double orifice air valve	No.	1.00		
Total car	ried to next page				

Total fro	m previous page		-	-	
5.4.4	JUNCTION CHAMBERS				
5.4.4.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	2.00		
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications				
	1No. Block Chamber at chainage				
5.4.4.2	140 / 125 mm dia VJ stepped coupling	No.	1.00		
5.4.4.3	125 mm dia single flanged GI piece (0.5 m long)	No.	2.00		
5.4.4.4	125 x 40 mm all flanged steel Tee	No.	1.00		
5.4.4.5	40 mm, 0.5m long Double flanged steel pipe	No.	1.00		
5.4.4.6	40 mm flanged sluice valve	No.	1.00		
5.4.4.7	40 mm, 0.5m long single flanged steel pipe	No.	1.00		
5.4.4.8	50 / 40 mm dia VJ stepped coupling	No.	1.00		
5.4.4.9	125 mm dia double flanged steel spigot (500mm long)	No.	1.00		
5.4.4.10	125 mm dia double flanged sluice valve	No.	1.00		
5.4.4.11	125 mm dia single flanged GI piece (0.5 m long)	No.	1.00		
SUB-TO	TAL CARRIED FORWARD FROM PRE	EVIOUS F	PAGE		

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	1No. Block Chamber at chainage 0+356m			
5.4.4.12	125 / 125 mm dia V/J stepped couplings	No.	1.00	
5.4.4.13	125 mm dia single flanged GI piece (0.5 m long)	No.	1.00	
5.4.4.14	125 x 50 mm all flanged steel tee	No.	1.00	
5.4.4.15	50 mm dia double flanged steel pipe (0.5m long)	No.	1.00	
5.4.4.16	50 mm flanged sluice valve	No.	1.00	
5.4.4.17	50 mm dia single flanged steel pipe (0.5m long)	No.	1.00	
5.4.4.18	63 / 50 mm dia VJ stepped coupling	No.	1.00	
5.4.4.19	125 x 100 mm dia flanged reducer	No.	1.00	
5.4.4.20	100 mm dia single flanged steel spigot (0.5m long)	No.	1.00	
5.4.4.21	100 / 110 mm dia V/J stepped couplings	No.	1.00	
	Block Chambers to 30No. offtakes to farms			
5.4.4.22	63 / 50 mm dia GI / uPVC adaptor	No.	64.00	
5.4.4.23	50 mm dia GI piece 500 mm long with threads	No.	64.00	
5.4.4.24	50 mm x 25mm dia socketed GI tee	No.	32.00	
5.4.4.25	25 mm, 0.5m long threaded steel pipe	No.	64.00	
5.4.4.26	25 mm dia GI union	No.	32.00	
5.4.4.27	25 mm dia GI nipple	No.	32.00	
5.4.4.28	25 mm dia gate valve	No.	32.00	
5.4.4.29	32 / 25 mm dia GI / uPVC adaptor	No.	32.00	
Total car	ried forward to next page			

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	Saddle clamps			
5.4.4.30	140 x 20 mm dia saddle clamp	No.	40.00	
	Adaptors			
5.4.4.31	25 / 20 mm dia GI / uPVC adaptor	No.	20.00	
	20N0. Block Chamber to Offtakes			
5.4.4.32	50 x 20 mm dia saddle clamp	No.	50.00	
5.4.4.33	20 / 25 mm dia uPVC / GI adaptor	No.	150.00	
5.4.4.34	25 mm dia, 1m long, uPVC pipe	No.	50.00	
5.4.4.35	20 mm, 0.5m long threaded steel pipe	No.	100.00	
5.4.4.36	20 mm dia GI union	No.	50.00	
5.4.4.37	20 mm dia GI nipple	No.	50.00	
5.4.4.38	20 mm dia gate valve	No.	50.00	
5.4.5	Road Crossings			
5.4.5.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2.00	
TOTAL C	CARRIED OVER TO COLLECTION SH	EET		

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.5.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.5.1.1	Excavation in normal soil	m ³	734.00		
5.5.1.2	Ditto for excavation in loose hard rock	m ³	74.00		
5.5.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
Note used pipe Pipe pres	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS- 06-149 Part 2:2000.				
	Class Working Pressure (m) PN6				
	PN8				
	PN10 PN12				
	uPVC Straights				
	PN6				

Total fro	m previous page		Γ	1
	BENDS			
	90 degrees			
5.5.2.2	160 mm dia	No.	2.00	
	22 degrees			
5.5.2.3	160 mm dia	No.	2.00	
	11.25 degrees			
5.5.2.4	160 mm dia	No.	2.00	
5.5.3	AIR VALVES			
5.5.3.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	1.00	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.			
	Double Air Valve (DAV) at Chainage 0+100m			
5.5.3.2	160 x160 x 50mm all flanged Tee	No.	1.00	
5.5.3.3	160mm uPVC/GI double flanged adaptor	No.	2.00	
5.5.3.4	50 mm x 400mm long double flanged steel piece	No.	1.00	
5.5.3.5	50 mm flanged gate valve	No.	1.00	
5.5.3.6	50 mm dia Double orifice air valve	No.	1.00	
Total ca	rried to next page			

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5.5.4	JUNCTION CHAMBERS			
5.5.4.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	2.00	
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications			
	1No.Junction Chamber, from Branch 1			
5.5.4.2	250mm x 250mm x 160mm all flanged tee	No	1.00	
5.5.4.3	250mm uPVC/GI double flange adaptors	No	2.00	
5.5.4.4	150mm , 0.5m long double flanged GI spigot	No	1.00	
5.5.4.5	160mm uPVC/GI double flanged adaptor	No	2.00	
5.5.4.6	150mm double flanged sluice valve	No	1.00	
5.5.4.7	160mm x 150mm V/J steeped couplings	No	1.00	
5.5.4.8	160mm x 150mm uPVC/GI adaptor	No	1.00	
Total ca	rried to next page		1	

Total fro	m previous page			
	Block Chambers to 30No. offtakes to farms			
5.5.4.9	63 / 50 mm dia GI / uPVC adaptor	No.	44.00	
5.5.4.10	50 mm dia GI piece 500 mm long with threads	No.	44.00	
5.5.4.11	50 mm x 25mm dia socketed GI tee	No.	22.00	
5.5.4.12	25 mm, 0.5m long threaded steel pipe	No.	44.00	
5.5.4.13	25 mm dia GI union	No.	22.00	
5.5.4.14	25 mm dia GI nipple	No.	22.00	
5.5.4.15	25 mm dia gate valve	No.	22.00	
5.5.4.16	32 / 25 mm dia GI / uPVC adaptor	No.	22.00	
	Saddle clamps			
5.5.4.17	125 x 20 mm dia saddle clamp	No.	40.00	
	Adaptors			
5.5.4.18	25 / 20 mm dia GI / uPVC adaptor	No.	20.00	
	20No. Block Chamber to Offtakes			
5.5.4.19	50 x 20 mm dia saddle clamp	No.	30.00	
5.5.4.20	20 / 25 mm dia uPVC / GI adaptor	No.	90.00	
5.5.4.21	25 mm dia, 1m long, uPVC pipe	No.	30.00	
5.5.4.22	20 mm, 0.5m long threaded steel pipe	No.	60.00	
5.5.4.23	20 mm dia GI union	No.	30.00	
5.5.4.24	20 mm dia GI nipple	No.	30.00	
5.5.4.25	20 mm dia gate valve	No.	30.00	
Total car	ried to next page			

Total from previous page					
5.5.5	Road Crossings				
5.5.5.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2.00		
TOTAL					

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.6.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.6.1.1	Excavation in normal soil	m ³	460.00		
5.6.1.2	Ditto for excavation in loose hard rock	m ³	46.00		
5.6.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06- 149 Part 2:2000.				
	Class Working Pressure (m)				
	PN6				
	PN8 PN10				
	PN12				
	uPVC Straights				
	PN8				

Total fro	m previous page	1	I	
	End cap			
5.6.2.3	90mm dia end cap	No	3.00	
	BENDS			
	45 degrees			
5.6.2.4	90 mm dia	No.	2.00	
	22 degrees			
5.6.2.5	90 mm dia	No.	2.00	
	11.25 degrees			
5.6.2.6	90 mm dia	No.	2.00	
5.6.3	WASHOUTS			
5.6.3.1	Excavate for, provide all materials and construct complete washout chambers. Internal dimensions 1000 x 750 x 1200 mm . Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No.	1.00	
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and drawings.			
	For W/O at chainage 660m			
5.6.3.2	90 / 80 mm dia VJ stepped coupling	No.	2.00	
5.6.3.3	50 mm dia single flanged GI piece (0.5 m long)	No.	2.00	
5.6.3.4	50 x 50 mm dia Level invert scour tee with flanged branch	No.	1.00	
5.6.3.5	50 mm flanged gate valve	No.	1.00	
5.6.3.6	50 mm dia 0.5m long single flanged GI piece	No.	1.00	
Total car	rried to next page	ı	ı	

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5.6.3.7	50 / 63 mm dia uPVC / GI adaptor	No.	2.00	
5.6.3.8	63 mm UPVC pipe Class B	m	6.00	
5.6.3.9	50mm dia GI pipe 0.5 m long with flap valve	No.	1.00	
5.6.3.10	80/90 uPVC/GI adaptor	No	2.00	
5.6.4	JUNCTION CHAMBERS			
5.6.4.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks, pipe supports, inspection covers, etc as detailed in the drawings.	No	2.00	
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications			
	1No Junction Chamber Offtake to Gitaimbuka A and B pipelines			
5.6.4.2	50 / 50 mm dia VJ stepped coupling	No.	1.00	
5.6.4.3	50 mm dia single flanged GI piece (0.5 m long)	No.	2.00	
5.6.4.4	50 x 50 mm all flanged steel tee	No.	1.00	
5.6.4.5	50 mm , 0.5m long double flanged GI piece	No.	1.00	
5.6.4.6	50 mm flanged gate valve	No.	2.00	
5.6.4.7	50 mm, 0.5m long single flanged steel pipe	No.	1.00	
5.6.4.8	40 / 50 mm dia V/J stepped coupling	No.	2.00	
Total ca	rried to next page		1	

Total fro	m previous page			
	Block Chambers to 30No. offtakes to farms			
	Saddle clamps			
5.6.4.9	50 x 20 mm dia saddle clamp	No.	20.00	
	Saddle clamps			
5.6.4.10	40 x 20 mm dia saddle clamp	No.	40.00	
	Adaptors			
5.6.4.11	25 / 20 mm dia GI / uPVC adaptor	No.	20.00	
5.6.5	Road Crossings			
5.6.5.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2.00	
TOTAL	CARRIED OVER TO COLLECTION	SHEET		

Bill No. 5	5.7 Mithakwa- Kahuho	1	1	1	
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.7.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.7.1.1	Excavation in normal soil	m ³	50		
5.7.1.2	Ditto for excavation in loose hard rock	m ³	5		
5.3.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and achorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.				
	Class Working Pressure (m) PN6				
	PN8				
	PN10				
	PN12 uPVC Straights				
	PN6				
5.3.2.1	Dia 250 mm	m	126		
	rried to next page				

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5.7.2	JUNCTION CHAMBERS				
5.7.2.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	2		
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications				
5.7.2.2	250mm 250mm x 250mm all flanged Tee	No	1		
5.7.2.3	250mm dia, 0.5m long double flanged GI spigot	No	1		
5.7.2.4	200mm dia, 0.5m long double flanged GI spigot	No	2		
5.7.2.5	110mm dia, 0.5m long double flanged GI spigot	No	2		
5.7.2.6	250mm uPVC/GI adaptor	No	4		
5.7.2.7	250mm dia double flanged sluice valve	No	1		
5.7.2.8	200mm dia double flanged sluice valve	No	1		
5.7.2.9	110mm dia double flanged sluice valve	No	1		
5.7.2.10	250mm x 200mm x 110mm all flanged Tee	No	1		
5.7.2.11	200mm uPVC/GI adaptor	No	2		
5.7.2.12	110mm uPVC/GI adaptor	No	2		
Total car	rried to next page				

Total from previous page					
5.7.3	Road Crossings				
5.7.3.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	1		
TOTAL	CARRIED OVER TO COLLECTION SHI	EET			

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.8.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.8.1.1	Excavation in normal soil	m ³	1,143.00		
5.8.1.2	Ditto for excavation in loose hard rock	m ³	114.30		
5.8.2	Pipe work				
	following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06- 149 Part 2:2000.				
	Class Working Pressure (m)				
	PN6				
	PN8 PN10				
	PN12				
	uPVC Straights				
	PN6				
5.8.2.1	250mm dia	m	1,304.85		
	PN8				
5.8.2.2	250mm dia	m	67.37	1	

Total fro	m previous page			1	
	BENDS				
	90 degrees				
5.8.2.4	250 mm dia	No.	2.00		
	45 degrees				
5.8.2.5	250 mm dia	No.	2.00		
	11.25 degrees				
5.8.2.6	250 mm dia	No.	4.00		
	SUB-TOTAL CARRIED FORWARD TO NEXT PAGE				
	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				
5.8.3	AIR VALVES				
5.8.3.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	1.00		
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.				
	Double Air Valve (DAV) at Chainage 0+217 and 0+756m				
5.8.3.2	250mm dia uPVC/GI adaptor	No.	2.00		
5.8.3.3	250mm x 250mm x 50mm all flanged GI tee	No.	1.00		
5.8.3.4	50 mm x 500mm long double flanged steel piece	No.	2.00		
Total car	ried to next page			1	

Total fro	m previous page			
5.8.3.5	50 mm flanged gate valve	No.	2.00	
5.8.3.6	50 mm dia Double orifice air valve	No.	2.00	
5.8.4	WASHOUTS			
5.8.4.1	Excavate for, provide all materials and construct complete washout chambers. Internal dimensions 1000 x 750 x 1200 mm . Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.			
	Provide, handle, install and test the following steel and uPVC pipes and fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and drawings			
	For W/O at chainage 0+632m			
5.8.4.2	250mm x 80mm level invert scour tee with flanges	No.	1.00	
5.8.4.3	80 mm x 500 mm long Double flanged steel spigot	No.	2.00	
5.8.4.4	80 mm dia 0.5 long flanged spigot with flap valve	No.	1.00	
5.8.4.5	80 mm dia 0.5m long single flanged steel pipe	No.	1.00	
5.8.4.6	80mm dia double flanged gate valve	No.	1.00	
5.8.4.7	80 mm UPVC pipe Class B	m	6.00	
SUB-TO	TAL CARRIED FORWARD TO NEX	T PAG		

TOTAL C	CARRIED FORWARD FROM PREVI	OUS P	AGE	
5.8.5	JUNCTION CHAMBERS			
5.8.5.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	2.00	
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications			
	1No Junction Chamber Offtake			
5.8.5.2	140 / 125 mm dia PVC U/GI stepped coupling	No.	1.00	
5.8.5.3	125 mm x 500 mm long Double flanged steel spigot	No.	1.00	
5.8.5.4	125 x 75 mm dia all flanged tee	No	1.00	
5.8.5.5	75 mm , 0.5m long double flanged GI piece	No	1.00	
5.8.5.6	75 mm flanged sluice valve	No	1.00	
5.8.5.7	75mm , 0.5m long single flanged GI piece	No	1.00	
5.8.5.8	75 / 75 mm dia uPVC/GI adaptor	No	1.00	
5.8.5.9	125 mm dia single flanged steel spigot (0.5 m long)	No	1.00	
5.8.5.10	125 / 125 mm dia V/J stepped coupling	No	1.00	
	1No. Block Chamber			
Total car	rried to next page			

5.8.5.11	125 / 125 mm dia V/J stepped couplings	No.	1.00	
5.8.5.12	125 mm dia single flanged GI piece (0.5 m long)	No.	1.00	
5.8.5.13	125 x 50 mm all flanged steel tee	No.	1.00	
5.8.5.14	50 mm dia double flanged steel pipe (0.5m long)	No.	1.00	
5.8.5.15	50 mm flanged sluice valve	No.	1.00	
5.8.5.16	50 mm dia single flanged steel pipe (0.5m long)	No.	1.00	
5.8.5.17	63 / 50 mm dia VJ stepped coupling	No.	1.00	
5.8.5.18	125 x 100 mm dia flanged reducer	No.	1.00	
5.8.5.19	100 mm dia single flanged steel spigot (0.5m long)	No.	1.00	
5.8.5.20	100 / 110 mm dia V/J stepped couplings	No.	1.00	
	Saddle clamps			
5.8.5.21	50 x 20 mm dia saddle clamp	No.	25.00	
	Saddle clamps			
5.8.5.22	75 x 20 mm dia saddle clamp	No.	25.00	
	Saddle clamps			
5.8.5.23	125 x 20 mm dia saddle clamp	No.	25.00	
	Saddle clamps			
5.8.5.24	140 x 20 mm dia saddle clamp	No.	25.00	
SUB-TO	TAL CARRIED FORWARD TO NEX			

Adaptors				
25 / 20 mm dia GI / uPVC adaptor	No.	20.00		
20 mm dia gate valve and fittings	No.	100.00		
Road Crossings				
Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	1.00		
	25 / 20 mm dia GI / uPVC adaptor 20 mm dia gate valve and fittings Road Crossings Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all	25 / 20 mm dia GI / uPVC adaptor No. 20 mm dia gate valve and fittings No. 20 mm dia gate valve and fittings No. Road Crossings Image: Comparison of the comparis	25 / 20 mm dia GI / uPVC adaptor No. 20.00 20 mm dia gate valve and fittings No. 100.00 Road Crossings Image: Comparison of the second s	25 / 20 mm dia GI / uPVC adaptor No. 20.00 20 mm dia gate valve and fittings No. 100.00 Road Crossings Image: Comparison of Comparison o

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.9.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.9.1.1	Excavation in normal soil	m ³	673		
5.9.1.2	Ditto for excavation in loose hard rock	m ³	67		
5.9.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes.				
	Pipe dimensions/working pressures shall conform to KS- 06-149 Part 2:2000.				
	Pipe dimensions/working pressures shall conform to KS-				
	Pipe dimensions/working pressures shall conform to KS- 06-149 Part 2:2000. Class Working Pressure (m)				

Total fro	m previous page			- [
	uPVC Straights				
	PN8				
5.9.2.1	Dia 250 mm	m	1,021		
	PN10				
5.9.2.2	Dia 250mm	m	203		
	End Cap				
5.9.2.3	250mm dia end cap	No	6		
	BENDS				
	45 degrees				
5.9.2.4	75 mm dia	No.	5		
	22 degrees				
5.9.2.5	75 mm dia	No.	4		
	11.25 degrees				
5.9.2.6	75 mm dia	No.	4		
TOTAL	CARRIED FORWARD TO NE	XT PAGE			

Total fro	m previous page				
	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE				
5.9.3					
5.9.3.1	Excavate for, provide all materials and construct complete air valve chambers. Internal dimensions 1200 x 1200 x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the detailed drawings.	No	1		
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completing all pipe joints as specified in the specifications.				
	Double Air Valve (DAV) at Chainage 0+550m				
5.9.3.2	75 / 75 mm dia VJ stepped coupling	No.	2		
5.9.3.3	50 mm dia single flanged Gl piece (0.5 m long)	No.	2		
5.9.3.4	50 x 50 mm double flanged steel tee	No.	1		
5.9.3.5	50 mm x 400mm long double flanged steel piece	No.	1		
5.9.3.6	50 mm flanged gate valve	No.	1		
5.9.3.7	50 mm dia Double orifice air valve	No.	1		
TOTAL (

Total fro	om previous page	1		
	SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE			
5.9.4	JUNCTION CHAMBERS			
5.9.4.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks, pipe supports, inspection covers, etc as detailed in the drawings. rates to include for lockable steel cover	No	1	
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications			
5.9.4.2	250mm x 200mm x 75mm Flanged Tee	No.	1	
	Adaptors			
5.9.4.3	250mm uPVC/GI adaptor	No.	2	
5.9.4.4	200mm uPVC/GI adaptor	No	2	
5.9.4.5	75mm uPVC/GI adaptor	No	2	
5.9.4.6	250mm dia, 0.5m long GI double flanged spigot	No	2	
5.9.4.7	200mm dia, 0.5m long GI double flanged spigot	No	2	
5.9.4.8	75mm dia, 0.5m long GI double flanged spigot	No	2	
Total car	ried to next page			

Total fro	m previous page			
5.9.4.9	250mm dia double flanged sluice valve	No	1	
5.9.4.10	200mm dia double flanged sluice valve	No	1	
5.9.4.11	75mm dia double flanged sluice valve	No	1	
5.9.5	Road Crossings			
5.9.5.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2	
TOTAL				
TOTAL	CARRIED OVER TO COLLECTIO	N SHEE		

Bill No. 5	No. 5.10 Mitero/Gikindu Branch Pipeline					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)	
5.10.1	Excavation and backfilling					
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.					
5.10.1.1	Excavation in normal soil	m ³	448			
5.10.1.2	Ditto for excavation in loose hard rock	m ³	45			
5.10.2	Pipe work					
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.					
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06-149 Part 2:2000.					
	Class Working Pressure (m)					
	PN6					
	PN8 PN10					
	PN12					
	uPVC Straights					
	PN6					
5.10.2.1	Dia 75mm	m	1,484			
	PN8					
Total car	ried forward to next page	1	1			

Total fro	m previous page			1		
5.10.2.2	Dia 75mm	m	255			
	End Cap					
5.10.2.3	75mm dia end cap	No	6			
	BENDS					
	45 degrees					
5.10.2.4	75 mm dia	No.	5			
	22 degrees					
5.10.2.5	75mm dia	No.	4			
	11.25 degrees					
5.10.2.6	75 mm dia	No.	4			
5.10.3	WASHOUTS					
5.10.3.1	Excavate for, provide all materials and construct complete washout chambers. Internal dimensions 1000 x 750 x 1200 mm . Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No.	1			
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and drawings.					
	For W/O at chainage 0+354m					
5.10.3.2	75 / 50 mm dia VJ stepped coupling	No.	2			
5.10.3.3	50 mm dia single flanged GI piece (0.5 m long)	No.	2			
5.10.3.4	200 x 50 mm dia Level invert scour tee with flanged branch	No.	1			
5.10.3.5	50 mm flanged gate valve	No.	1			
Total carried forward to next page						

Total fro	m previous page			
5.10.3.6	50 mm dia 0.5m long single flanged GI piece	No.	1	
5.10.3.7	50 / 63 mm dia uPVC / GI adaptor	No.	2	
5.10.3.8	63 mm UPVC pipe Class B	m	6	
5.10.3.9	50mm dia GI pipe 0.5 m long with flap valve	No.	1	
5.10.4	Road Crossings			
5.10.4.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2	
TOTAL (CARRIED OVER TO COLLECTION SHE	ET		

Bill No. 5					
ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.11.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.11.1.1	Excavation in normal soil	m ³	1,375		
5.11.1.2	Ditto for excavation in loose hard rock	m ³	137		
5.11.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS-06- 149 Part 2:2000.				
	Class Working Pressure (m)				
	PN6				
	PN8				
	PN10 PN12				
	uPVC Straights				
	PN6				
5.11.2.1	Dia 200 mm	m	2,500		
Total car	ried to next page		l	1	

m previous page						
BENDS						
45 degrees						
200 mm dia	No.	2				
22 degrees						
200 mm dia	No.	2				
11.25 degrees						
200 mm dia	No.	2				
SUB-TOTAL CARRIED FORWARD FROM PREVIOUS PAGE						
	BENDS 45 degrees 200 mm dia 22 degrees 200 mm dia 11.25 degrees 200 mm dia	BENDS	BENDS Image: Second			

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (Ksh)	AMOUNT (Ksh)
5.12.1	Excavation and backfilling				
	Rates for excavation and backfilling in trench shall include for trimming trench bottom and for providing selected bedding and surround materials from the excavations as per the specifications. Depth of excavation not exceeding 1.0 m.				
5.12.1.1	Excavation in normal soil	m3	165.01		
5.12.1.2	Ditto for excavation in loose hard rock	m3	16.50		
5.12.2	Pipe work				
	Provide, lay, joint and test the following flexible spigot and socket pipe and fittings with rubber ring joints. Rates to include for all jointing materials, cutting, wastage and anchorage.				
	Note: The following have been used on the drawings to specify pipe diameters/types/classes. Pipe dimensions/working pressures shall conform to KS- 06-149 Part 2:2000.				
	Class Working Pressure (m)				
	PN6				
	PN8 PN10				
	PN12				
	uPVC Straights				
	PN8				
	Dia 90mm	m	1,044.10		

Total from	n previous page				
	End cap				
5.12.2.2	90mm dia end cap	No	3.00		
	BENDS				
	45 degrees				
5.12.2.3	90 mm dia	No.	2.00		
	22 degrees				
5.12.2.4	90 mm dia	No.	2.00		
	11.25 degrees				
5.12.2.5	90 mm dia	No.	2.00		
5.12.3	WASHOUTS				
5.12.3.1	Excavate for, provide all materials and construct complete washout chambers. Internal dimensions 1000 x 750 x 1200 mm. Rates to include for all thrust blocks, pipe supports, inspection covers, etc as detailed in the drawings.	No.	1.00		
	Provide, handle, install and test the following steel and uPVC pipes, fittings and valves. Rates shall include for completion and pipe protection at all pipe joints as specified in specifications and drawings.				
	For W/O at chainage 660m				
5.12.3.2	90 / 80 mm dia VJ stepped coupling	No.	2.00		
5.12.3.3	50 mm dia single flanged GI piece (0.5 m long)	No.	2.00		
5.12.3.4	50 x 50 mm dia Level invert scour tee with flanged branch	No.	1.00		
Total carr	ied forward to next page			1	

Total from	n previous page			
5.12.3.5	50 mm flanged gate valve	No.	1.00	
5.12.3.6	50 mm dia 0.5m long single flanged GI piece	No.	1.00	
5.12.3.7	50 / 63 mm dia uPVC / GI adaptor	No.	2.00	
5.12.3.8	63 mm UPVC pipe Class B	m	6.00	
5.12.3.9	50mm dia GI pipe 0.5 m long with flap valve	No.	1.00	
5.12.3.10	80/90 uPVC/GI adaptor	No	2.00	
5.12.4	JUNCTION CHAMBERS			
5.12.4.1	Excavate for, provide all materials and construct complete inspection valve chambers at the pipe junctions. Internal dimensions 1000 x7500x 1200 mm. Rates to include for all thrust blocks , pipe supports, inspection covers, etc as detailed in the drawings.	No	2.00	
	Provide, handle, install and test the following steel (or GI)/uPVC pipes, fittings and valves in the pipeline junctions (inspection valve chambers). Rates shall include for completing all pipe joints as specified in the specifications			
	1No Junction Chamber Offtaketo Gitaimbuka A and B pipelines			
5.12.4.2	50 / 50 mm dia VJ stepped coupling	No.	1.00	
5.12.4.3	50 mm dia single flanged GI piece (0.5 m long)	No.	2.00	
Total carr	ied forward to next page			

Total from	n previous page	1		
5.12.4.4	50 x 50 mm all flanged steel tee	No.	1.00	
5.12.4.5	50 mm , 0.5m long double flanged GI piece	No.	1.00	
5.12.4.6	50 mm flanged gate valve	No.	2.00	
5.12.4.7	50 mm, 0.5m long single flanged steel pipe	No.	1.00	
5.12.4.8	40 / 50 mm dia V/J stepped coupling	No.	2.00	
	Block Chambers to 30No. offtakes to farms			
	Saddle clamps			
5.12.4.9	50 x 20 mm dia saddle clamp	No.	20.00	
	Saddle clamps			
5.12.4.10	40 x 20 mm dia saddle clamp	No.	40.00	
	Adaptors			
5.12.4.11	25 / 20 mm dia GI / uPVC adaptor	No.	20.00	
5.12.5	Road Crossings			
5.12.5.1	Provide for minor road crossing structures taking reference to drawings. Rates to include for excavation and backfilling, culvert, concrete surround and all jointing materials and other fittings defined in specifications.	No.	2.00	
TOTAL C	ARRIED OVER TO COLLECTION	SHEET		

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE (KSh)	AMOUNT (KSh)
	All Units				
6.1.1	25 mm dia uPVC/GI adaptor	No.	836		
6.1.2	25 mm dia GI elbow	No.	836		
6.1.3	25 mm dia GI straight threaded on both sides 1000 mm long	No.	836		
6.1.4	25 mm dia GI nipple	No.	836		
6.1.5	25 mm dia gate valve	No.	836		
6.1.6	90mm x 90mm x 25mm saddle clamp	No	40		
6.1.7	250mm x 250mm x 25mm saddle clamp	No	369		
6.1.8	160mm x 160mm x 25mm saddle clamp	No	41		
6.1.9	200mm x 200mm x 25mm saddle clamp	No	128		
6.1.10	75mm x 75mm x 25mm saddle clamp	No	23		

ITEM	DESCRIPTION		QUANTITY	RATE (KSh)	AMOUNT (KSh)
7.1	THE WHOLE OF THIS BILL IS PROVISIONAL				
	LABOUR				
	The rates should include for all costs, such as insurance, traveling time, overtime, accommodation, use of small tools of trade, supervision, overheads and profit. Only time engaged upon work will be paid for:				
7.2	Unskilled labour	Hrs	100		
7.3	Semi-skilled labour	Hrs	80		
7.4	Skilled Labour	Hrs	65		
	PLANT				
	The rates should be included for all operational and maintenance costs, fuel, oil, operators, turn boys, Supervision, overhead and profits. Only the time employed on work will be paid for and the rates should include the idle, traveling and overtime.				
7.5	Compressor CP with 2 jacks	Hrs	40		
7.6	Concrete vibrator (petrol or diesel)	Hrs	32		
7.7	Concrete mixer, 1m ³	Hrs	25		
7.8	Tipper 7 tones	Hrs	46		
7.9	Portable water pump 5hp 50mm inclusive of hoses, couplings, valves and strainer)	Hrs	32		
	MATERIALS				
7.10	Ordinary Portland cement	ton	0.5		
7.11	Mild steel/High yield steel	ton	0.5	<u> </u>	
7.12	Fine aggregate for concrete	m ³	12		
7.13	Coarse Aggregate for concrete max. size 19mm	m ³	12		
7.14	Use of Shuttering timber	m ²	50		

Schedule of Adjustment Data

Table A - Local Currency

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Local Currency Amount	Bidder's Proposed Weighting
	Nonadjustable	_			A: B: C: D: E:
			Total		1.00

Table B - Foreign Currency

Name of Currency: _____

If the Bidder wishes to quote in more than one foreign currency, this table should be repeated for each foreign currency.

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Currency in Type/Amount	Equivalent in FC1	Bidder's Proposed Weighting
	Nonadjustable					A: B: C: D: E:
Total						1.00

Summary of Payment Currencies

Table: Alternative A

Forinsert name of Section of the Works

Separate tables may be required if the various sections of the Works (or of the Bill of Quantities) will have substantially different foreign and local currency requirements. The Employer should insert the names of each Section of the Works.

	Α	В	С	D
Name of Payment Currency	Amount of Currency	Rate of Exchange to Local Currency	Local Currency Equivalent C = A x B	Percentage of Net Bid Price (NBP) <u>100xC</u> NBP
Local currency		1.00		
Foreign Currency #1				
Foreign Currency #2				
Foreign Currency #3				
Net Bid Price				100.00
Provisional Sums Expressed in Local Currency		1.00		
BID PRICE				

Table: Alternative B

To be used only with Alternative B Prices directly quoted in the currencies of payment. (Clause **ITB** 15.1)

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

Name of currency	Amounts payable
Local currency:	
Foreign currency #1:	
Foreign currency #2:	
Foreign currency #3:	

Form of Bid Security (Bank Guarantee)

[Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: _____ [Name and Address of Employer]

Date: _____

BID GUARANTEE No.:

We have been informed that	[name of the Bidder] (hereinafter
called "the Bidder") has submitted to you its	bid dated (hereinafter called "the
Bid") for the execution of	[name of contract] under Invitation for Bids No.
("the IFB").	

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Employer, we _____ [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of ______ [amount in figures] (______) [amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the performance security, in accordance with **ITB** 38.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; and (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[signature(s)]

Form of Bid Security (Bid Bond)

BOND NO. _____

BY THIS BOND [name of Bidder] as Principal (hereinafter called "the Principal"), and [name, legal title, and address of surety], **authorized to transact business in** [name of country of Employer], as Surety (hereinafter called "the Surety"), are held and firmly bound unto [name of Employer] as Obligee (hereinafter called "the Employer") in the sum of [amount of Bond]¹⁰ [amount in words], for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted a written Bid to the Employer dated the ____ day of _____, 20___, for the construction of [name of Contract] (hereinafter called the "Bid").

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

- (a) withdraws its Bid during the period of bid validity specified in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Employer during the period of Bid validity; (i) fails or refuses to execute the Contract Form, if required; or (ii) fails or refuses to furnish the Performance Security in accordance with the Instructions to Bidders;

then the Surety undertakes to immediately pay to the Employer up to the above amount upon receipt of the Employer's first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the thirty[30] days after the date of expiration of the Bid validity as stated in the Invitation to Bid or extended by the Employer at any time prior to this date, notice of which extension(s) to the Surety being hereby waived.

¹⁰ The amount of the Bond shall be denominated in the currency of the Employer's country or the equivalent amount in a freely convertible currency.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this _____ day of _____ 20__.

Principal:	Surety: Corporate Seal (where appropriate)		
(Signature)	(Signature)		
(Printed name and title)	(Printed name and title)		

Form of Bid-Securing Declaration

Date: [insert date (as day, month and year)]

Bid No.: [insert number of bidding process]

Alternative No.: [insert identification No if this is a Bid for an alternative]

To: [insert complete name of Employer]

We, the undersigned, declare that:

We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Borrower for the period of time of **[Employer to 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 Bid during the period of bid validity specified in the Letter of Bid; or
- (b) having been notified of the acceptance of our Bid by the Employer 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 **ITB** 38.

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Signed: [insert signature of person whose name and capacity are shown] In the capacity of [insert legal capacity of person signing the Bid-Securing Declaration]

Name: [insert complete name of person signing the Bid-Securing Declaration]

Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

Dated on ______ day of ______, ____ [insert date of signing]

Corporate Seal (where appropriate)

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.]

Technical Proposal

Technical Proposal Forms

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Contractor's Equipment

Personnel

Others

Site Organization

Method Statement

Mobilization Schedule

Construction Schedule

Contractor's Equipment

Form EQU

The Bidder 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 Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

Type of Equip	ment*		
Equipment Information			power rating
	Capacity*	Year of ma	anufacture*
Current Status	Current location		
	Details of current commitments		
Source	Indicate source of the equipment	Leased	Specially manufactured

The following information shall be provided only for equipment not owned by the Bidder.

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

Proposed Personnel

Form PER – 1

Bidders should provide the names of suitably qualified personnel to meet the specified requirements for each of the positions listed in Section III, Evaluation and Qualification Criteria. The data on their experience should be supplied using the Form below for each candidate.

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name
4.	Title of position
	Name
5.	Title of position
	Name
6.	Title of position
	Name
etc.	Title of position
	Name

Resume of Proposed Personnel

Form PER – 2

The Bidder shall provide all the information requested below. Fields with asterix (*) shall be used for evaluation.

Position*			
Personnel information	Name * Date of birth		
	Professional qualifications		
Present employment	Name of Employer		
	Address of Employer		
	Telephone	Contact (manager / personnel officer)	
	Fax	E-mail	
	Job title	Years with present Employer	

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

From*	To*	Company, Project, Position, and Relevant Technical and Management Experience*

Others

Bidder's Qualification

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

Г

Bidder Information Sheet

Form ELI - 1.1

Date:		
Bidding No	D.:	
-	for Bid No.: _	
Page	of	pages

1. Bidder's Legal Name
2. In case of Joint Venture, Consortium or Association (JVCA), legal name of each party:
3. Bidder's actual or intended Country of Registration:
4. Bidder's Year of Registration:
5. Bidder's Legal Address in Country of Registration:
6. Bidder's Authorized Representative Information
Name:
Address:
Telephone/Fax numbers:
Email Address:
7. Attached are copies of original documents of:
Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Clauses 4.1 and 4.2.
□ In case of JVCA, letter of intent to form JVCA including a draft agreement, or JVCA agreement, in accordance with ITB Clause 4.1
□ In case of government owned entity from the Employer's country, documents establishing legal and financial autonomy and compliance with the principles of commercial law, in accordance with ITB Clause 4.5.

Party to JVCA Information Sheet

Form ELI - 1.2

Date:		
Bidding No.:		
Invitation	for Bid No.:_	
Page	of	pages

1. Bidder's Legal Name:
2. JVCA's Party legal name:
3. JVCA's Party Country of Registration:
4. JVCA's Party Year of Registration:
5. JVCA's Party Legal Address in Country of Registration:
6. JVCA's Party Authorized Representative Information
Name:
Address:
Telephone/Fax numbers:
Email Address:
7. Attached are copies of original documents of:
Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Clauses 4.1 and 4.2.
□ In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with the principles of commercial law, in accordance with ITB Clause 4.5.

	Н	istorical Contract Non-Performance	е
		Form CON – 2	
Bidder's Legal Name: JVCA Partner Legal Name:		me:	of pages
		Page	of pages
Non	-Performing Co	ontracts in accordance with (Evaluation and Qualific	ation Criteria)
Sub-Factor	or 2.2.1 of Section cart non-perform	nance did not occur during the stipulated period, in a ion III, Evaluation and Qualification Criteria. nance during the stipulated period, in accordance was uation and Qualification Criteria.	
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, KSH equivalent)
		Contract Identification: Name of Employer: Address of Employer: Matter in dispute:	
Pendi	ng Litigation, ir	n accordance with Section III, Evaluation and Quali	fication Criteria
Qualifica	tion Criteria.	in accordance with Sub-Factor 2.2.3 of Section III, ccordance with Sub-Factor 2.2.3 of Section III, Eva	
	Outcome as Percent of Total Assets	a, as indicated below Contract Identification	Total Contract Amount (current value, KSH equivalent)
		Contract Identification: Name of Employer: Address of Employer: Matter in dispute:	· · · · · · · · · · · · · · · · · · ·
		Contract Identification: Name of Employer: Address of Employer: Matter in dispute:	

Current Contract Commitments / Works in Progress

Form CCC

Bidders and each partner to a JVCA 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	Employer, contact address/tel/fax	Value of outstanding work (current KSH equivalent)	Estimated completion date	Average monthly invoicing over last six months (Ksh/month)
1.				
2.				
3.				
4.				
5.				
etc.				

Financial Situation

Form FIN - 3.1

Historical Financial Performance

Bidder's Legal Name:	Date:		
JVCA Partner Legal Name:	Bidding No.:		
-	Page	of	pages

To be completed by the Bidder and, if JVCA, by each partner

Financial information in Ksh	Historic information for previous () years (Ksh)						
	Year 1	Year 2	Year 3	Year	Year n	Avg.	Avg. Ratio
Information fro	m Balance	e Sheet					
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information fro	m Income	Statement	-	1		1	
Total Revenue (TR)							
Profits Before Taxes (PBT)							

- □ Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:
 - Must reflect the financial situation of the Bidder or partner to a JVCA, and not sister or parent companies
 - Historic financial statements must be audited by a certified accountant
 - Historic financial statements must be complete, including all notes to the financial statements
 - Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

Average Annual Turnover

Form FIN - 3.2

Bidder's Legal Name:	Date:
JVCA Partner Legal Name:	Bidding No.:
-	Page of pages

	Annual turnover data (construction only)	
Year	Amount and Currency	Ksh
		·
_		
*Average _		
Annual		
Construction		
Turnover		

*Average annual turnover calculated as total certified payments received for work in progress or completed over the number of years specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.2, divided by that same number of years.

Financial Resources

Form FIN – 3.3

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 indicated in Section III, Evaluation and Qualification Criteria.

Source of financing	Amount Ksh
1.	
2.	
3.	
4	
4.	

General Experience

Form EXP - 2.4.1

 Bidder's Legal Name:
 Date:

JVCA Partner Legal Name:
 Bidding No.:

Page
 of

Starting Month /	Ending Month /	T sie	Contract Identification	Role of Bidder
Year	Year	Years*		
			Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	
			Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	
			Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	
			Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	
			Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	
			Contract name: Brief Description of the Works performed by the Bidder: Name of Employer: Address:	

*List calendar year for years with contracts with at least nine (9) months activity per year starting with the earliest year

Specific Experience					
Form EXP – 2.4.2(a)					
Bidder's Legal Name:		Date:			
JVCA Partner Legal Name:	B	idding No.:			
		Page	of pages		
Similar Contract Number: [insert specific number] of[insert total number of contracts required.		Information			
Contract Identification					
Award date					
Completion date					
Role in Contract	Contractor	D Management Contractor	U Subcontractor		
Total contract amount			Ksh		
If partner in a JVCA or subcontractor, specify participation of total contract amount	%		Ksh		
Employer's Name:					
Address:					
Telephone/fax number: E-mail:					

Specific Experience (cont.)

Form EXP - 2.4.2(a) (cont.)

Bidder's Legal Name:	_ Page	of	pages
JVCA Partner Legal Name:			

Similar Contract No[insert specific number] of[insert total number of contracts] required	Information
Description of the similarity in accordance with Sub-Factor 2.4.2(a) of Section III, Evaluation and Qualification Criteria:	
Amount	
Physical size	
Complexity	
Methods/Technology	
Physical Production Rate	

Specific Experience in Key Activities

Form EXP – 2.4.2(b)

Bidder's Legal Name:	Date:		
JVCA Partner Legal Name:	Bidding No.:		
Subcontractor's Legal Name:	Page	of	pages

		Information	
Contract Identification			
Award date			
Completion date			
Role in Contract	Contractor	□ Management Contractor	□ Subcontractor
Total contract amount			Ksh
If partner in a JVCA or subcontractor, specify participation of total contract amount	%		Ksh
Employer's Name:			·
Address:			
Telephone/fax number:			
E-mail:			

Specific Experience in Key Activities (cont.)

Form EXP - 2.4.2(b) (cont.)

Bidder's Legal Name:	Page	of pages
JVCA Partner Legal Name:		
Subcontractor's Legal Name:		

	Information
Description of the key activities in accordance with Sub-Factor 2.4.2(b) of Section III, Evaluation and Qualification Criteria:	
Amount	
Physical size	
Complexity	
Methods/Technology	
Physical Production Rate	

Section V. Eligible Countries

Eligibility for the Provision of Goods, Works and Related Services in Bank-financed Procurement

A. <u>Provision at Paragraph 1.6 of the Bank's **Rules and Procedures for Procurement of** Goods and Works</u>

1.6 The World Bank/GOK permits firms and individuals from all countries to offer goods, works and services for Word Bank funded projects.

PART 2 – Employer's Requirements

Section VI. Requirements

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Technical specifications are provided in Tender documents volume III.

Drawings

Technical drawings form part of the tender documents and are provided as volume II

Supplementary Information

PART 3 – Conditions of Contract and Contract Forms

Section VII. General Conditions (GC)

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

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Section VII. General Conditions

[Name of Employer] _____ [Name of Contract] _____

1.

General Provisions

1.1 Definitions

In the Conditions of Contract ("these Conditions"), which include **Particular Conditions**, and these **General Conditions**, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1 The Contract

- 1.1.1.1 "Contract" means the Contract Agreement, the Letter of Acceptance, the Letter of Bid, these Conditions, the Specification, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.
- 1.1.1.2 "Contract Agreement" means the contract agreement referred to in GC Clause 1.6 [Contract Agreement].
- 1.1.1.3 "Letter of Acceptance" means the letter of formal acceptance, signed by the Employer, of the Letter of Bid, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.1.4 "Letter of Bid" means the document entitled letter of bid, which was completed by the Contractor and includes the signed offer to the Employer for the Works.
- 1.1.1.5 "Specification" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.
- 1.1.1.6 "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 Employer in accordance with the Contract.
- 1.1.1.7 "Schedules" means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Bid, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

Kamwamba Irrigation Project Tender Document Volume IPart III Conditions of Contract and contract forms

- 1.1.1.8 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.
- 1.1.1.10 "Bid" means the Letter of Bid and all other documents which the Contractor submitted with the Letter of Bid, as included in the Contract.

1.1.1.11 **PC** means **Particular Conditions**

1.1.2 Parties and Persons

- 1.1.2.1 "Party" means the Employer or the Contractor, as the context requires.
- 1.1.2.2 "Employer" means the person named as employer in the **Particular Conditions** and the legal successors in title to this person.
- 1.1.2.3 "Contractor" means the person(s) named as contractor in the Letter of Bid accepted by the Employer and the legal successors in title to this person(s).
- 1.1.2.4 "Project Manager" is the person named in the **PC** (or any other competent person appointed by the Employer 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.
- 1.1.2.5 "Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.6 "Bank" means the financing institution (if any) named in the **PC**.
- 1.1.2.7 "Borrower" means the person (if any) named as the borrower in the **PC**.
- 1.1.2.8 The "Adjudicator" is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in **GC** Clause 1.32.

1.1.3 Dates, Tests, Periods and Completion

- 1.1.3.1 "Base Date" means the twenty one (21) days prior to the latest date for submission of the Bid.
- 1.1.3.2 "Commencement Date" means the date notified under the **PC**.
- 1.1.3.3 "Completion Date" means the date for completion of the Works, or a Section (as the case may be) as certified by the Project Manager, in accordance with **GC** Clause 7.1.1, and as stipulated in the **PC**.
- 1.1.3.4 "Test on Completion" means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification for the purpose of issuing the "Certificate of Completion of the Works".
- 1.1.3.5 "Taking-Over Certificate" or "Certificate of Completion of the Works" means a certificate issued under GC Clause 7.1 [Completion].
- 1.1.3.6 "day" means a calendar day and "year" means 365 days.

Kamwamba Irrigation Project Tender Document Volume IPart III Conditions of Contract and contract forms

1.1.3.7 "Dayworks" 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.

1.1.4 Money and Payments

- 1.1.4.1 "Initial 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.
- 1.1.4.2 "Contract Price" means the price defined in GC Clause 4.1 [Contract Price], and includes adjustments in accordance with the Contract.
- 1.1.4.3 "Compensation Events" are those defined in **GC** Clause 4.7 [Compensation Events] hereunder.

1.1.5 Works and Goods

- 1.1.5.1 "Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 "Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
- 1.1.5.4 "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
- 1.1.5.5 "Plant" means the apparatus, machinery and other equipment intended to form or forming part of the Permanent Works, including vehicles purchased for the Employer and relating to the construction or operation of the Works.
- 1.1.5.6 "Section" means a part of the Works specified in the **PC** as a Section (if any).
- 1.1.5.7 "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 "Works" mean the Permanent Works and the Temporary Works, or either of them as appropriate, and as described in the **PC**.

1.1.6 Other Definitions

- 1.1.6.1 "Contractor's Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.
- 1.1.6.2 "Country" means the country in which the Site (or most of it) is located.
- 1.1.6.3 "Force Majeure" is defined in GC Clause 6.1 [Force Majeure].

1.1.6.4	"Laws" means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.			
1.1.6.5	"Performance Security" means the security (or securities, if any) under GC Clause 4.15 [Securities].			
1.1.6.6	"Site" means the places where the Permanent Works are to be executed including storage and working areas and to which Plant and Materials are to be delivered, and any other places as may be specified in the PC as forming part of the Site.			
1.1.6.8	"Unforeseeable" or "Unforeseen" means not reasonably foreseeable by an experienced Contractor by the Base Date.			
1.1.6.9	"Variation" means any change to the Works, which is instructed or approved as a variation under GC Clause 4.3 [Variations].			
1.2	Interpretation			
1.2.1	Interp	retation In the Contract, except where the context requires otherwise:		
	(a)	words indicating one gender include all genders;		
	• •	words indicating the singular also include the plural and words indicating the plural also include the singular;		
		provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;		
	• •	"written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;		
	• •	the word "tender" is synonymous with "bid" and "tenderer" with "bidder" and the words "tender documents" with "bidding documents".		
1.2.2	The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.			
1.2.3	If sectional completion is specified in the PC , references in the GC 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).			
1.3	Com	nunications		
1.3.1	certifi	ever these Conditions provide for the giving or issuing of approvals, cates, consents, determinations, notices, requests and discharges, these nunications shall be:		
		in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the PC ; and		

- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the **PC**. However:
 - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued
- 1.3.2 Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party.
- 1.3.3 When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.

1.4 Law and Language

1.4.1 The Contract shall be governed by the law of the country or other jurisdiction stated in the **PC**.

The ruling language of the Contract shall be that stated in the **PC**.

The language for communications shall be that stated in the **PC**. If no language is stated there, the language for communications shall be the ruling language of the Contract.

1.4.2 Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.

The Contractor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Contractor.

1.5 Priority of Documents

- 1.5.1 The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:
 - (a) the Contract Agreement (if any),
 - (b) the Letter of Acceptance,
 - (c) the Bid,
 - (d) the Particular Conditions
 - (e) these General Conditions,
 - (f) the Specification,
 - (g) the Drawings, and
 - (h) the Schedules and any other documents forming part of the Contract.
- 1.5.2 If an ambiguity or discrepancy is found in the documents, the Project Manager shall issue any necessary clarification or instruction.

1.6 Contract Agreement

1.6.1 The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless the **Particular Conditions** establish otherwise. The Contract Agreement shall be based upon the relevant form provided in Section IX, Contract Forms. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

1.7 Assignment

- 1.7.1 Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:
 - (a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and
 - (b) may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

1.8 Care and Supply of Documents

1.8.1 The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

- 1.8.2 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Project Manager six copies of each of the Contractor's Documents.
- 1.8.3 The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.
- 1.8.4 If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9 Confidential Details

1.9.1 The Contractor's and the Employer's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify the Contractor's compliance with the Contract and allow its proper implementation.

Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

1.9.2 Notwithstanding the above, the Contractor may furnish to its Subcontractor(s) such documents, data and other information it receives from the Employer to the extent required for the Subcontractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this Clause.

1.10 Compliance with Laws

- 1.10.1 The Contractor shall, in performing the Contract, comply with applicable Laws.
- 1.10.2 Unless otherwise stated in the **Particular Conditions**:
 - (a) the Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the Employer's Country, which (i) such authorities or undertakings require the Employer to obtain in the Employer's name, and (ii) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract;

the Contractor shall acquire and pay for all permits, approvals and/or (b) licenses from all local, state or national government authorities or public service undertakings in the Employer's Country, which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, visas for the Contractor's and Subcontractor's personnel and entry permits for all imported Contractor's Equipment. The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Employer under GC Clause 1.10.2(a) hereof and that are necessary for the performance of the Contract. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Employer or its personnel, including the Subcontractors and their personnel, but without prejudice to GC Clause 1.10.1 hereof.

1.11 Joint and Several Liability

1.11.1 If the Contractor is a joint venture, consortium, or association (JVCA) of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfilment of the provisions of the Contract, unless otherwise specified in the **PC**, and shall designate one of such persons to act as a leader with authority to bind the JVCA. The composition or the constitution of the JVCA shall not be altered without the prior consent of the Employer.

1.12 Inspections and Audit by the Bank

- 1.12.1 The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the Contractor's accounts and records relating to the performance of the Contract and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank.
- 1.12.2 The Contractor shall maintain all documents and records related to the Contract for a period of three (3) years after completion of the Works. The Contractor shall provide any documents necessary for the investigation of allegations of fraud, collusion, coercion, obstruction or corruption and require its employees or agents with knowledge of the Contract to respond to questions from the Bank.

1.13 Project Manager's Decisions

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

1.14 Delegation

1.14.1 The Project Manager may delegate any of his duties and responsibilities and may cancel any delegation after notifying the Contractor.

1.15 Subcontracting

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

1.16 Personnel and Equipment

- 1.16.1 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.
- 1.16.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

1.17 Other Contractors

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

1.18 Employer's and Contractor's Risks

1.18.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

1.19 Employer's Risks

- 1.19.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Employer'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 Employer 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 Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 1.19.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to
 - (a) a Defect which existed on the Completion Date,
 - (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
 - (c) the activities of the Contractor on the Site after the Completion Date.

1.20 Contractor's Risks

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

1.21 Insurance

- 1.21.1 The Contractor shall provide, in the joint names of the Employer 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 **PC** 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.

- 1.21.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Commencement 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.
- 1.21.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer 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.
- 1.21.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.
- 1.21.5 Both parties shall comply with any conditions of the insurance policies.

1.22 Site Investigation Reports

1.22.1 The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the **PC**, supplemented by any information available to the Bidder.

1.23 Contractors to Construct the Works

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

1.24 The Works to Be Completed by the Intended Completion Date

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

1.25 Approval by the Project Manager

- 1.25.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, who is to approve them if they comply with the Specifications and Drawings.
- 1.25.2 The Contractor shall be responsible for design of Temporary Works.
- 1.25.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 1.25.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

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

1.26 Safety

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

1.27 Discoveries

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

1.28 Possession of the Site

1.28.1 The Employer 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 **PC**, the Employer shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.

1.29 Access to the Site

1.29.1 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.

1.30 Instructions

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

1.31 Appointment of the Adjudicator

- 1.31.1 The Adjudicator shall be appointed jointly by the Employer and the Contractor, at the time of the Employer's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the Employer does not agree on the appointment of the Adjudicator, the Employer will request the Appointing Authority designated in the **PC**, to appoint the Adjudicator within 14 days of receipt of such request.
- 1.31.2 Should the Adjudicator resign or die, or should the Employer 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 Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the **PC** at the request of either party, within 14 days of receipt of such request.

1.32 Procedure for Disputes

- 1.32.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.
- 1.32.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 1.32.3 The Adjudicator shall be paid by the hour at the rate specified in the **PC**, together with reimbursable expenses of the types specified in the **PC**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.
- 1.32.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place specified in the **PC**.

Time Control

2.1 Programme

2.

- 2.1.1 Within the time stated in the **PC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Programme 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 Programme shall be consistent with those in the Activity Schedule.
- 2.1.2 An update of the Programme 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.
- 2.1.3 The Contractor shall submit to the Project Manager for approval an updated Programme at intervals no longer than the period stated in the **PC**. If the Contractor does not submit an updated Programme within this period, the Project Manager may withhold the amount stated in the **PC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme 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.
- 2.1.4 The Project Manager's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Project Manager again at any time. A revised Programme shall show the effect of Variations and Compensation Events.

2.2 Extension of the Intended Completion Date

- 2.2.1 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.
- 2.2.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

2.3 Acceleration

- 2.3.1 When the Employer 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 Employer accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 2.3.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they are incorporated in the Contract Price and treated as a Variation.

2.4 Delays Ordered by the Project Manager

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

2.5 Management Meetings

- 2.5.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 2.5.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the Employer. 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.

2.6 Early Warning

- 2.6.1 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.
- 2.6.2 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

3. Quality Control

3.1 Identifying Defects

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

3.2 Tests

3.2.1 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.

3.3 Correction of Defects

3.3.1 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 **PC**. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

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.

3.4 Uncorrected Defects

3.4.1 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.

Cost Control

4.1 Contract Price

4.

- 4.1.1 In the case of an admeasurement contract, 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.
- 4.1.2 In the case of a lump sum contract, the Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

4.2 Changes in the Contract Price

- 4.2.1 In the case of an admeasurement contract:
 - (a) 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.
 - (b) 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 Employer.
 - (c) 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.
- 4.2.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Programme or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

4.3 Variations

- 4.3.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.
- 4.3.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and

before the Variation is ordered.

- 4.3.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 4.3.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 4.3.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 4.3.6 In the case of an admeasurement contract, 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 **GC** Clause 4.2.1 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.

4.4 Cash Flow Forecasts

4.4.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, 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.

4.5 Payment Certificates

- 4.5.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 4.5.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- 4.5.3 The value of work executed shall be determined by the Project Manager.
- 4.5.4 The value of work executed shall comprise:
 - (a) In the case of an admeasurement contract, the value of the quantities of work in the Bill of Quantities that have been completed; or
 - (b) In the case of a lump sum contract, the value of work executed shall

comprise the value of completed activities in the Activity Schedule.

- 4.5.5 The value of work executed shall include the valuation of Variations and Compensation Events.
- 4.5.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

4.6 Payments

- 4.6.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer 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.
- 4.6.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 4.6.3 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 4.6.4 Items of the Works for which no rate or price has been entered in shall not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

4.7 Compensation Events

- 4.7.1 The following shall be Compensation Events:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date pursuant to GC Clause 1.29.
 - (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
 - (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
 - (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
 - (e) The Project Manager unreasonably does not approve a subcontract to be let.

- (f) 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.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 4.7.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 4.7.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.
- 4.7.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

4.8 Tax

4.8.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 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 **GC** Clause 4.10.

4.9 Currencies

4.9.1 Where payments are made in currencies other than the currency of the Employer's country specified in the **PC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.

4.10 Price Adjustment

4.10.1 Prices shall be adjusted for fluctuations in the cost of inputs only if provided for in the **PC**. 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 indicated below applies to each Contract currency:

$P_c = A_c + B_c Imc/Ioc$

where:

 P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

 A_c and B_c are coefficients¹¹ specified in the **PC**, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and **Imc** is the index prevailing at the end of the month being invoiced and **Ioc** is the index prevailing 21 days before Bid opening for inputs payable; both in the specific currency "c."

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

¹¹ The sum of the two coefficients A_c and B_c should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency is added to the Contract Price.

4.11 Retention

- 4.11.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the **PC** until Completion of the whole of the Works.
- 4.11.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GC Clause 7.1.1, 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.

4.12 Liquidated Damages

- 4.12.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the **PC** 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 **PC**. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.
- 4.12.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in **GC** Clause 4.6.1.

4.13 Bonus

4.13.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day stated in the **PC** 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.

4.14 Advance Payment

4.14.1 The Employer shall make advance payment to the Contractor of the amounts stated in the **PC** by the date stated in the **PC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer 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.

- 4.14.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 4.14.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

4.15 Securities

4.15.1 The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount specified in the **PC**, by a bank or surety acceptable to the Employer, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until 28 days 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.

4.16 Dayworks

- 4.16.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 4.16.2 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.
- 4.16.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

4.17 Cost of Repairs

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.

Staff and Labour

5.1 Forced Labour

5.

5.1.1 The Contractor shall not employ forced labour, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements.

5.2 Child Labour

5.2.1 The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where the relevant labour laws have provisions for employment of minors, the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work.

5.3 Workers' Organizations

5.3.1 In countries where the relevant labour laws recognize workers' rights to form and to join workers' organisations of their choosing without interference and to bargain collectively, the Contractor shall comply with such laws. Where the relevant labour laws substantially restrict workers' organisations, the Contractor shall enable alternative means for Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. In either case described above, and where the relevant labour laws are silent, the Contractor shall not discourage Contractor's Personnel from forming or joining workers' organisations of their choosing or from bargaining collectively, and shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organisations and bargain collectively. The Contractor shall engage with such workers representatives. Worker organisations are expected to fairly represent the workers in the workforce.

5.4 Non-Discrimination and Equal Opportunity

5.4.1 The Contractor shall not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment relationship on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. In countries where the relevant labour laws provide for non-discrimination in employment, the Contractor shall comply with such laws. When the relevant labour laws are silent on non-discrimination in employment, the Contractor shall meet this Clause's requirements. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on inherent requirements of the job shall not be deemed discrimination.

Force Majeure

6.1 Definition of Force Majeure

6.

- 6.1.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:
 - (a) which is beyond a Party's control,
 - (b) which such Party could not reasonably have provided against before entering into the Contract,
 - (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
 - (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
- (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radioactivity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

6.2 Notice of Force Majeure

- 6.2.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.
- 6.2.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.

6.2.3 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract

6.3 Duty to Minimise Delay

- 6.3.1 Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.
- 6.3.2 A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

6.4 Consequences of Force Majeure

- 6.4.1 If the Contractor is prevented from performing its substantial obligations under the Contract by Force Majeure of which notice has been given under GC Clause 6.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to GC Clause 1.32.1 [Procedure for Disputes] to:
 - (a) an extension of time for any such delay, if completion is or will be delayed, under GC Clause 2.2 [Extension of the Intended Completion Date], and
 - (b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of GC Clause 6.1 [Definition of Force Majeure] and, in the case of GC Clause 6.1.1(d)(ii) to (iv), occurs in the Country, payment of any such Cost, including the costs of rectifying or replacing the Works and/or Goods damaged or destructed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in GC Clause 1.21 [Insurance].
- 6.4.2 After receiving this notice, the Project Manager shall proceed in accordance with GC Clause 1.13 [Project Manager's Decisions] to agree or determine these matters.

6.5 Force Majeure Affecting Subcontractor

6.5.1 If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

6.6 Optional Termination, Payment and Release

6.6.1 If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under GC Clause 6.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the

Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with **GC** Clause 7.5.5.

- 6.6.2 Upon such termination, the Project Manager shall determine the value of the work done and issue a Payment Certificate which shall include:
 - (a) the amounts payable for any work carried out for which a price is stated in the Contract;
 - (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;
 - (c) other Costs or liabilities which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works;
 - (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and
 - (e) the Cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of termination.

6.7 Release from Performance

6.7.1

- 7.1 Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfill its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:
 - (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
 - (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under GC Clause 6.6 [Optional Termination, Payment and Release] if the Contract had been terminated under GC Clause 6.6.

Finishing the Contract

7.1 Completion

7.

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

7.2 Taking Over

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

7.3 Final Account

7.3.1 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.

7.4 Operating and Maintenance Manuals

- 7.4.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the **PC**.
- 7.4.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the **PC** pursuant to **GC** Clause 7.4.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the **PC** from payments due to the Contractor.

7.5 Termination

- 7.5.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 7.5.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Programme 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 28 days;
 - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

- (d) a payment certified by the Project Manager is not paid by the Employer 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 **PC**; or
- (h) if the Contractor, as determined by the Employer, based on reasonable evidence, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GC Clause 7.6 [Fraud and Corruption].
- 7.5.3 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 GC Clause 7.5.2 above, the Project Manager shall decide whether the breach is fundamental or not.
- 7.5.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 7.5.5 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.

7.6 Fraud and Corruption

- 7.6.1 If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days' notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of GC Clause 7.5 [Termination] shall apply as if such expulsion had been made under GC Clause 7.5.2.
- 7.6.2 Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, coercive or obstructive practice during the execution of the work then that employee shall be removed in accordance with GC Clause 1.16.2.
- 7.6.3 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank Financing), as well as bidders, suppliers, and contractors, and their agents (whether declared or not), subcontractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts¹². In pursuance of this policy, the Bank:

¹² In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

defines, for the purposes of this provision, 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 party¹³;
- (ii) "Fraudulent Practice" is any act or omission, including a misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party¹⁴ to obtain financial or other benefit or to avoid an obligation;
- (iii) "Collusive Practice" is an arrangement between two or more parties¹⁵, designed to achieve an improper purpose, including to influence improperly the actions of another party; and
- (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 party¹⁶;
- (v) "obstructive practice" is

(a)

(v.1) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation 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

(v.2) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under clause 1.12 [Inspections and Audits by the Bank]

- (b) will reject a proposal for award if it determines that the bidder recommended for award or any of its personnel, or its agents, or its sub-consultants, subcontractors, 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;
- (c) will declare misprocurement and cancel the portion of the Financing allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of such Financing engaged in Corrupt, Fraudulent, Collusive, Coercive or Obstructive Practices during the

¹³ For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes Bank staff and employees of other organizations taking or reviewing procurement decisions.

¹⁴ For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

¹⁵ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

¹⁶ For the purpose of this sub-paragraph, "party" refers to a participant in the procurement process or contract execution.

procurement or the implementation of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures¹⁷, including by publicly declaring such firm or individual ineligible either indefinitely or for a stated period of time, (i) to be awarded Bank-financed contracts and (ii) to be a nominated¹⁸ sub-contractor, consultant, supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and
- (e) will require that a clause be included in bidding documents and in contracts financed by the Bank, requiring bidders, suppliers and contractors and their subcontractors, agents, personnel, consultants, service providers, or suppliers to permit the Bank to inspect all accounts and records and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by the Bank.

7.7 Payment upon Termination

7.7.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the **PC**. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.

¹⁷ A firm or an individual may be declared ineligible to be awarded a Bank financed contract: (i) upon completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, or otherwise decided by the Bank; and through the application of the Proposal for the Implementation of a Sanctions Process within the African Development Bank Group; and (ii) as a result of temporary suspension or early temporary suspension in connection with an on-going sanction proceeding. See footnote 18 and paragraph 9 of Appendix 1 of the Rules and Procedures for Procurement of Goods and Works.

¹⁸ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding documents) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirement for the particular bid; or (ii) appointed by the Borrower."

7.7.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, 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.

7.8 Property

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

7.9 Release from Performance

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

7.10 Suspension of Bank Financing

- 7.10.1 In the event that the Bank suspends the Financing to the Employer, from which part of the payments to the Contractor are being made:
 - (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice.
 - (b) If the Contractor has not received sums due it within the 28 days for payment provided for in GC Clause 4.6.1, the Contractor may immediately issue a 14-day termination notice.

7.11 Eligibility¹⁹

- 7.11.1 The Contractor shall have the nationality from an eligible country of the Bank in accordance with the Bank's **Rules and Procedures for Procurement of Goods and Works**, as listed in Section V, Eligible Countries. The Contractor shall be deemed to have the nationality of a country if the Contractor is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.
- 7.11.2 The materials, equipment and services to be supplied under the Contract shall have their origin in eligible source countries and all expenditures under the

¹⁹ For the purposes of Eligibility, the provisions of the Bank's *Rules and Procedures for Procurement of Goods and Works* have been presented in detail at Section V, Eligible Countries.

Contract will be limited to such materials, equipment, and services. At the Employer's request, the Contractor may be required to provide evidence of the origin of materials, equipment and services.

7.11.3 For purposes of **GC** Clause 7.11.1, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

Section VIII. Particular Conditions

1. General Provisions			
GC 1.1.2.2	The Employer is: Chief officer, Department of Agriculture		
GC 1.1 .2.4	The Project Manager is: County Project Coordinator, NARIGP KIAMBU COUNTY		
GC 1.1.2.6	The Bank is: World Bank		
GC 1.1.2.7	The Borrower is: Republic of Kenya/NARIGP		
GC 1.1.3.2	The Commencement Date shall be: <i>not later than 14 days after signing of the contract</i>		
GC 1.1.3.3	The Completion Date for the whole of the Works shall be: <i>ten</i> (10) <i>months after commencement of the works</i> .		
GC 1.1.5.6	If Sections are to be used: N/A		
GC 1.1.5.8	 The contract works include: Description of the works Construction of intake works as per the drawings Construction of sedimentation basin (SB) Laying and fixing of pipe network plus all the accessories as specified Fitting of plot hydrants to farms as directed 		
GC 1.1.6.6	LOCATION OF THE SITE Chania and Mangu Wards in Gatundu North Sub-County, Kiambu County		

GC 1.2.3	Sectional Completions shall not be applicable.							
GC 1.2.4(i)	The following documents also form part of the Contract: a) the Letter of Acceptance b) the Bid c) All Addenda, if any d) the Particular Conditions e) the General Conditions f) the Specification g) the Drawings; and h) the completed Schedules,							
GC 1.3.1(a)	The Electronic Transmission System is: None							
GC 1.3.1(b)	The Employer's address for the purpose of communications is:							
	COUNTY SECRETARY & HEAD OF PUBLIC SERVICE COUNTY GOVERNMENT OF KIAMBU							
	P.O. Box 2344-00900							
	KIAMBU							
	The Contractor's address for the purpose of communications is: [state full address, telephone, fax and e-mail]							
GC 1.4.1	The governing law is that of: Republic of Kenya							
	The ruling language is: English							
	The language for communications is: English							
GC 1.6.1	The Parties shall enter into contract within 30 days after the Contractor receives the Letter of Acceptance.							
GC 1.10.2(a)	Permits, approvals and/or licenses, or public service undertakings to be acquired by the Employer: as in the specifications							
GC 1.10.2(b)	Permits, approvals and/or licenses, or public service undertakings to be acquired by the Contractor: as in the specifications							
GC 1.11.1	The individuals or firms in a joint venture, consortium or association shall be jointly and severally liable.							
GC 1.17.1	Schedule of Other Contractors: None							
GC 1.21.1	The minimum insurance amounts and deductibles shall be:							
	(a) for loss or damage to the Works, Plant and Materials: KES 100,000.00							

GC 4.10.1	The Contract "shall not" be subject to price adjustment, in accordance with GC Clause 4.10.1, and the following information regarding coefficients						
GC 4.9.1	The currency of the Employer's country is: <i>Kenya Shillings</i>						
	4. Cost Control						
GC 3.3.1	The Defects Liability Period is: 6months after the date of substantial completion.						
	3. Quality Control						
	The amount to be withheld for late submission of an updated Programme is: 10% of amount due in next certificate						
GC 2.1.3	The period between Programme updates is 14 days or as may need arise.						
GC 2.1.1	The Contractor shall submit for approval a Programme for the Works within 7 days from the date of the Letter of Acceptance.						
2. Time Control							
	The place of arbitration shall be: Nairobi, Kenya]						
GC 1.32.4	Institution whose arbitration procedures shall be used: The Institution of Engineers of Kenya						
GC 1.32.3	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: as per as body's policy						
	P.O. Box 41346 - 00100 Nairobi, Kenya Email Address: iek@iekenya.org						
GC 1.31.1 & 1.31.2	Appointing Authority for the Adjudicator: The Institution of Engineers of Kenya						
GC 1.28.1	The Site Possession Date(s) shall be <i>immediately after site handing over</i> .						
GC 1.22.1	Site Investigation Reports shall include: design report , drawings and any other investigation as may be required by the engineer						
	(ii) of other people: KES 100,000.00						
	 (d) for personal injury or death: (i) of the Contractor's employees: KES 50,000.00 						
	and Equipment) in connection with Contract: KES 50,000.00						
	 (b) for loss or damage to Equipment: KES 50,000.00 (c) for loss or damage to property (except the Works, Plant, Materials, 						

	1						
GC 4.11.1	The proportion of payments retained is: 10%						
GC 4.12.1	The Liquidated Damages for the whole of the Works are 0.05 of the final Contract Price, per day. The maximum amount of Liquidated Damages for the whole of the Works is 5% of the final Contract Price.						
GC 4.13.1	The Bonus for the whole of the Works is 0% of the final Contract Price, per day. The maximum amount of Bonus for the whole of the Works is 0% of the final Contract Price.						
GC 4.14.1	The Advance Payment shall be: N/A						
GC 4.15.1	The Performance Security amount is: 10% of contract sum in the form of:						
	(a) Bank Guarantee:						
	[A Bank Guarantee shall be unconditional (on demand) (see Section IX, Contract Forms).						
7. Finishing the Contract							
GC 7.4.1	The date by which operating and maintenance manuals are required shall be: date of completion of works						
	The date by which "as built" drawings are required shall be: date of completion of works						
GC 7.4.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GC Clause 7.7.1 shall be: KES 100,000.00						
GC 7.5.2 (g)	The maximum number of days is: 30 days						
GC 7.7.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, shall be: 100% of work not done						

Section IX. Contract Forms

This Section contains Contract Forms which, once completed, will constitute part of the Contract. The forms for Contract Agreement, Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder, after contract award

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Letter of Acceptance

[on letterhead paper of the Employer]

..... [date].....

To: [name and address of the Contractor]

Subject: [Notification of Award Contract No].....

You are requested to furnish the Performance Security in the amount of [insert amount (s) in figures and words and name(s) of currency(ies)] within 30 days²⁰ in accordance with the Conditions of Contract, using for that purpose the Performance Security Form included in Section IX (Contract Forms) of the Bidding Document.

We accept the appointment of **[Employer to insert full name and address of alternative appointee proposed by Bidder in Letter of Bid]** as the Adjudicator. / We do not accept the appointment of **[Employer to insert full name and address of alternative appointee proposed by Bidder in Letter of Bid]** as the Adjudicator. And, consequently, the provisions of **GC** Clause 1.31 shall apply.²¹

Authorized Signature:
Name and Title of Signatory:
Name of Agency:
Attachment: Contract Agreement

²⁰ Or, the alternative deadline stipulated in the **Particular Conditions**.

²¹ Use one of the two options as appropriate.

Contract Agreement

THIS CONTRACT AGREEMENT is made on the [insert: number] day of [insert: month], [insert: year].

BETWEEN

(1) [insert complete name of the Employer], a [insert description of type of legal entity, for example, an agency of the Ministry of] of the Government of {insert name of Country of the Employer}, or corporation incorporated under the laws of { insert name of Country of the Employer } and having its principal place of business at [insert address of the Employer] (hereinafter called "the Employer"),

and

(2) **[insert name of the Contractor]**, a corporation incorporated under the laws of **[insert: country of Contractor]** and having its principal place of business at **[insert: address of Contractor]** (hereinafter called "the Contractor").

WHEREAS the Employer invited bids for the Works, described as **[insert brief description of the Works]** and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein, and the Employer agrees to pay the Contractor the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

- (*a*) the Letter of Acceptance
- (*b*) the Bid
- (c) the Addenda Nos [insert addenda numbers if any]. . . .
- (d) the Particular Conditions
- (e) the General Conditions
- (*f*) the Specification
- (g) the Drawings; and
- (*h*) the completed Schedules,

3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Agreement to be executed in accordance with the laws of [insert name of the borrowing country] on the day, month and year indicated above.

Signed by:	Signed by:
For and on behalf of the Employer	for and on behalf the Contractor
In the presence of:	in the presence of:
Witness, Name, Signature, Address, D	ate

Witness, Name, Signature, Address, Date

Option I: Performance Security

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

Date: [insert date (e.g., day, month, and year)]

Bidding Process Reference: [insert no. and title of bidding process]

Bank's Branch or Office: [insert complete name of Guarantor]

Beneficiary: [insert complete name of Employer]

PERFORMANCE GUARANTEE No.: [insert Performance Guarantee number]

We have been informed that **[insert complete name of the Contractor]** (hereinafter called "the Contractor") has entered into Contract No. **[insert number]** dated **[insert day and month]**, **[insert year]** with you, for the execution and completion of **[insert description of the Works]** and the remedying of any defects therein (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a Performance Guarantee is required.

At the request of the Employer, we hereby irrevocably undertake to pay you any sum(s) not exceeding **[insert amount**(s^{22}) **in figures and words]** such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing declaring the Contractor to be in default under the Contract, without cavil or argument, or your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

²² The Bank shall insert the amount(s) specified in the **PC** and denominated, as specified in the **PC**, either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Employer.

This Guarantee shall expire no later than the **[insert number]** day of **[insert month]**, **[insert year]**,²³ and any demand for payment under it must be received by us at this office on or before that date. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.

[Signatures of authorized representatives of the bank]

²³ Insert the date twenty-eight days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer 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. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "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 Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."]

Option II: Performance Bond

By this Bond	as	Principal	(hereinafter	called	"the	Con	tractor")
and]	as	Surety
(hereinafter called "the Surety"), are hele	d ai	nd firmly b	ound unto] as
Obligee (hereinafter called "the Employ	er")) in the an	nount of			;	, for the
payment of which sum well and truly to be made in the types and proportions of currencies in							
which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs,							
executors, administrators, successors and	assi	gns, jointly	and severally	, firmly	by the	ese p	resents.

WHEREAS the Contractor has entered into a written Agreement with the Employer dated the _____ day of _____, 20 _____, for ______ in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

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 Employer to be, in default under the Contract, the Employer having performed the Employer's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

(1) complete the Contract in accordance with its terms and conditions; or

(2) obtain a Bid or bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer 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 Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or

(3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

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 Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

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 ___.

Advance Payment Security

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated.]

Date: [insert date (e.g., day, month, and year) of Bid Submission]

Bidding Process Reference: [insert number and title of bidding process]

[bank's letterhead]

Beneficiary: [insert legal name and address of Employer]

ADVANCE PAYMENT GUARANTEE No.: [insert Advance Payment Guarantee no.]

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum ... [insert currency and amount in figures]²⁴.... (..... [insert currency and amount in words]....) is to be made against an advance payment guarantee.

At the request of the Employer, we **[insert name of the Bank]**.... hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of **[insert currency and amount in figures]***..... (..... **[insert currency and amount in words]**.....) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than performing his obligations under the Contract or the costs of mobilization in respect of the Works.

²⁴ The Guarantor shall insert an amount representing the amount of the advance payment denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded..

Note –

All italicized text (including footnotes) is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.

²⁵ Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer 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. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [insert number of months], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.]

Retention Money Security

Demand Guarantee

_____ [insert Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: ______ [insert Name and Address of Employer]

Date: _____ [insert date (e.g., day, month, and year)]

RETENTION MONEY GUARANTEE No.: [insert Retention Money Guarantee no.]

We have been informed that _____ [insert name of Contractor] (hereinafter called "the Contractor") has entered into Contract No. _____ [insert reference number of contract] dated ______ [insert date] with you, for the execution of ______ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, when the Taking-Over Certificate has been issued for the Works and the first half of the Retention Money has been certified for payment, payment of [insert either "the second half of the Retention Money", or, if the amount guaranteed under the Performance Guarantee, when the Taking-Over Certificate is issued, is less than half of the Retention Money, "the difference between half of the Retention Money and the amount guaranteed under the Performance Guaranteed under the Performance Security"] is to be made against a Retention Money guarantee.

At the request of the Employer, we _____ [insert name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of _____ [insert amount in figures] (_) [insert amount in words]¹ upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than the costs of mobilization in respect of the Works.

¹ The Guarantor shall insert an amount representing the amount of the second half of the Retention Money or, if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and denominated either in the currency(ies) of the second half of the Retention Money as specified in the Contract, or in a freely convertible currency acceptable to the Employer.

It is a condition for any claim and payment under this guarantee to be made that the payment of the second half of the Retention Money referred to above must have been received by the Contractor on its account number _____ [insert Contractor's account number] at _____ [insert name and address of the Bank].

This guarantee shall expire, at the latest, 21 days after the date when the Employer has received a copy of the Performance Certificate issued by the Project Manager. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[signature(s)]

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