

# **COAST WATER SERVICES BOARD**



## **BIDDING DOCUMENTS**

**Project Name: De-Silting and Expansion of Water Pans and Earth Dams, Drilling and Equipping of Boreholes**

Issued on: **18<sup>th</sup> December 2018**

**For**

**Contract Name: DRILLING & EQUIPPING OF 1No. SHALLOW BOREHOLE AT PORTREITZ SPECIAL SCHOOL, CHANGAMWE SUB-COUNTY**

Tender No. **CWSB/T/SPB/W/18/2018-2019**

**Employer:**

**COAST WATER SERVICES BOARD**  
P.O. BOX 90417-80100  
MOMBASA, KENYA

**December 2018**

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## INSTRUCTIONS TO TENDERERS.

### 1. General

1.1 The Employer as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The successful Tenderer will be expected to complete the Works by the Intended Completion Date specified in the said Appendix.

1.2 Tenderers shall include the following information and documents with their tenders, unless otherwise stated:

- (a) **copies of certificates of registration, and principal place of business;**
- (b) **Ensure your firm is e- citizen linked**
- (c) **Submit Anti-Corruption Declaration Commitment/ Pledge**
- (d) **Valid Tax Compliance Certificate**
- (e) **Copies of PIN Certificate**
- (f) **Copies of VAT Certificate**
- (g) **Valid Copies of CR 12**
- (h) **Copies valid AGPO Certificate**
- (i) **Dully completed , Signed & Stamped Tender Securing declaration**
- (j) **Dully filled, signed and stamped price schedules & Bill of quantities.**
- (k) **Bid Validity shall be 90 days**
- (l) **Power of attorney shall be required**
- (m) **Dully completed , Signed & Stamped Form of Tender**
- (n) **Dully completed , Signed & Stamped Business questionnaire**
- (o) **Copies of certificate of registration NCA 8 and above on water works**
- (p) **Document must be paginated**
- (q) **total monetary value of construction work performed for each of the last Three (3) years;**
- (r) **experience in works of a similar nature and size for each of the last Three (3) years, and clients who may be contacted for further information on these contracts;**
- (s) **major items of construction equipment owned or leased**
- (t) **qualifications and experience of key site management and technical personnel proposed for the Contract;**
- (u) **reports on the financial standing of the Tenderer, such as profit and loss statements and auditor's reports for the last two years;**
- (v) **Authority to seek references from the Tenderer's bankers.**

1.3 The Tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible or liable for those costs.

- 1.4 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Tenderer's own expense.
- 1.5 The procurement entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- 1.6 The price to be charged for the tender document shall not exceed Kshs.5,000/=
- 1.7 The procuring entity shall allow the tenderer to review the tender document free of charge before purchase.

## **2. Tender Documents**

- 2.1 The complete set of tender documents comprises the documents listed here below and any addenda issued in accordance with clause 2.4 here below: -
  - (a) These instructions to Tenderers
  - (b) Form of Tender
  - (c) Conditions of Contract and Appendix to Conditions of Contract
  - (d) Specifications
  - (e) Drawings
  - (f) Bills of Quantities/Schedule of Rates (whichever is applicable)
  - (g) Other materials required to be filled and submitted in accordance with these Instructions and Conditions
- 2.2 The Tenderer shall examine all instructions, forms and specifications in the tender documents. Failure to furnish all information required by the tender documents may result in rejection of his tender.
- 2.3 A prospective Tenderer making inquiries of the tendering documents may notify the Employer in writing or by cable, telex or facsimile at the address indicated in the letter of invitation to tender. The Employer will respond to any request for clarification received earlier than seven [7] days prior to the deadline for submission of tenders. Copies of the Employer's response will be forwarded to all persons issued with tendering documents, including a description of the inquiry, but without identifying its source.
- 2.4 Before the deadline for submission of tenders, the Employer may modify the tendering documents by issuing addenda. Any addendum

thus issued shall be part of the tendering documents and shall be communicated in writing or by cable, telex or facsimile to all Tenderers. Prospective Tenderers shall acknowledge receipt of each addendum in writing to the Employer.

- 2.5 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their tenders, the Employer shall extend, as necessary, the deadline for submission of tenders in accordance with clause 4.2 here below.

### **3. Preparation of Tenders**

- 3.1 All documents relating to the tender and any correspondence shall be in English Language.
- 3.2 The tender submitted by the Tenderer shall comprise the following:-
- (a) The Tender;
  - (b) Tender Security;
  - (c) Priced Bill of Quantities/Schedule of Rates for lump-sum Contracts
  - (d) Any other materials required to be completed and submitted by Tenderers.
- 3.3 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities/Schedule of Rates. Items for which no rate or price is entered by the Tenderer will not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities/Schedule of Rates. All duties, taxes and other levies payable by the Contractor under the Contract, as of 30 days prior to the deadline for submission of tenders, shall be included in the tender price submitted by the Tenderer.
- 3.4 The rates and prices quoted by the Tenderer shall not be subject to any adjustment during the performance of the Contract.
- 3.5 The unit rates and prices shall be in Kenya Shillings.
- 3.6 Tenders shall remain valid for a period of sixty (60) days from the date of submission. However in exceptional circumstances, the Employer may request that the Tenderers extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing.
- 3.7 The Tenderer shall prepare one original of the documents comprising the tender documents as described in these Instructions to Tenderers.
- 3.8 The original shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the

Tenderer. All pages of the tender where alterations or additions have been made shall be initialed by the person or persons signing the tender.

3.9 Clarification of tenders shall be requested by the tenderer to be received by the procuring entity not later than 7 days prior to the deadline for submission of tenders.

3.10 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

#### **4. Submission of Tenders**

4.1 The tender duly filled and sealed in an envelope shall; -

(a) be addressed to the Employer at the address provided in the invitation to tender;

[b] bear the name and identification number of the Contract as defined in the invitation to tender; and

[c] provide a warning not to open before the specified time and date for tender opening.

4.2 Tenders shall be delivered to the Employer at the address specified above not later than the time and date specified in the invitation to tender.

4.3 The tenderer shall not submit any alternative offers unless they are specifically required in the tender documents.

Only one tender may be submitted by each tenderer. Any tenderer who fails to comply with this requirement will be disqualified.

4.4 Any tender received after the deadline for opening tenders will be returned to the tenderer un-opened.

4.5 The Employer may extend the deadline for submission of tenders by issuing an amendment in accordance with sub-clause 2.5 in which case all rights and obligations of the Employer and the Tenderers previously subject to the original deadline will then be subject to the new deadline.

#### **5. Tender Opening and Evaluation**

5.1 The tenders will be opened in the presence of the Tenderers' representatives who choose to attend at the time and in the place specified in the invitation to tender.

- 5.2 The Tenderers' names, the total amount of each tender and such other details as may be considered appropriate, will be announced at the opening by the Employer . Minutes of the tender opening, including the information disclosed to those present will also be prepared by the Employer.
- 5.3 Information relating to the examination, clarification, evaluation and comparison of tenders and recommendations for the award of the Contract shall not be disclosed to Tenderers or any other persons not officially concerned with such process until the award to the successful Tenderer has been announced. Any effort by a Tenderer to influence the Employer's officials, processing of tenders or award decisions may result in the rejection of his tender.
- 5.4 Tenders determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows:
- (a) where there is a discrepancy between the amount in figures and the amount in words, the amount in words will prevail; and
  - (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will prevail, unless in the opinion of the Employer's representative, there is an obvious typographical error, in which case the adjustment will be made to the entry containing that error.
  - (c) In the event of a discrepancy between the tender amount as stated in the Form of Tender and the corrected tender figure in the main summary of the Bill of Quantities/Quotation, the amount as stated in the Form of Tender shall prevail.
  - (d) The Error Correction Factor shall be computed by expressing the difference between the tender amount and the corrected tender sum as a percentage of the Corrected Builder's Work (i.e. corrected tender sum less P.C. and Provisional Sums).
  - (e) The Error Correction Factor shall be applied to all Builder's Work (as a rebate or addition as the case may be) for the purposes of valuations for Interim Certificates and valuation of variations.
  - (f) The amount stated in the tender will be adjusted in accordance with the above procedure for the correction of errors and with concurrence of the Tenderer, shall be considered as binding upon the Tenderer. If the Tenderer does not accept the corrected amount, the tender may be rejected and the Tender Security forfeited.
- 5.5 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.



- 5.6 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)
- 5.7 Where contract price variation is allowed, the valuation shall not exceed 15% of the original contract price.
- 5.8 Price variation requests shall be processed by the procuring entity within 30 days of receiving the request.
- 5.9 Preference where allowed in the evaluation of tenders shall not exceed 15%
- 5.10 To assist in the examination, evaluation, and comparison of tenders, the Employer at his discretion, may request [in writing] any Tenderer for clarification of the tender, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, telex or facsimile but no change in the tender price or substance of the tender shall be sought, offered or permitted.
- 5.11 The Tenderer shall not influence the Employer on any matter relating to his tender from the time of the tender opening to the time the Contract is awarded. Any effort by the Tenderer to influence the Employer or his employees in his decision on tender evaluation, tender comparison or Contract award may result in the rejection of the tender.

## **6. Award of Contract**

- 6.1 The award of the Contract will be made to the Tenderer who has offered the lowest evaluated tender price.
- 6.2 Notwithstanding the provisions of clause 6.1 above, the Employer reserves the right to accept or reject any tender and to cancel the tendering process and reject all tenders at any time prior to the award of Contract without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the action.
- 6.3 The Tenderer whose tender has been accepted will be notified of the award prior to expiration of the tender validity period in writing or by cable, telex or facsimile. This notification (hereinafter and in all Contract, documents called the "Letter of Acceptance") will state the sum [hereinafter and in all Contract documents called the "Contract Price" which the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract. The contract shall be formed on the parties signing the contract. At the same time the other tenderers shall be informed that their tenders have not been successful.

- 6.4 The Contract Agreement will incorporate all agreements between the Employer and the successful Tenderer. It will be signed by the Employer and sent to the successful Tenderer, within 30 days following the notification of award. Within 21 days of receipt, the successful Tenderer will sign the Agreement and return it to the Employer.
- 6.5 Within 21 days after receipt of the Letter of Acceptance, the successful Tenderer shall deliver to the Employer a Performance Security amount stipulated in the Appendix to Conditions of Contract.
- 6.6 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.
- 6.7 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.
- 6.8 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

## **7. Corrupt and fraudulent practices**

- 7.1 The procuring entity requires that the tenderer observes the highest standard of ethics during the procurement process and execution of the contract. A tenderer shall sign a declaration that he has not and will not be involved in corrupt and fraudulent practices.
- 7.2 The procuring entity will reject a tender if it determines that the tenderer recommended for award has engaged in corrupt and fraudulent practices in competing for the contract in question.
- 7.3 Further a tenderer who is found to have indulged in corrupt and fraudulent practices risks being debarred from participating in public procurement in Kenya.



**SECTION III**  
**CONDITIONS OF CONTRACT**

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## SECTION III - CONDITIONS OF CONTRACT

### 1. Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**“ A Subcontractor”** is a person or corporate body who has a .....0xzContract with the Contractor to carry out a part of the Work in the Contract, which includes Work on the Site.

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

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

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

## 2. Contract Documents

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

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

## 3. Employer’s Representative’s Decisions

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

## 4. Works, Language and Law of Contract

- 4.1 The Contractor shall construct and install the Works in accordance with the Contract documents. The Works may commence on the Start Date and shall be carried out in accordance with the Program submitted by the Contractor, as updated with the approval of the Employer's Representative, and complete them by the Intended Completion Date.
- 4.2 The ruling language of the Contract shall be English language and the law governing the Contract shall be the law of the Republic of Kenya.

## **5. Safety, Temporary works and Discoveries**

- 5.1 The Contractor shall be responsible for design of temporary works and shall obtain approval of third parties to the design of the temporary works where required.
- 5.2 The Contractor shall be responsible for the safety of all activities on the Site.
- 5.3 Any thing of historical or other interest or significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Employer's Representative of such discoveries and carry out the Employer's Representative's instructions for dealing with them.

## **6 Work Program and Sub-contracting**

- 6.1 Within seven days after Site possession date, the Contractor shall submit to the Employer's Representative for approval a program showing the general methods, arrangements, order and timing for all the activities in the Works.
- 6.2 The Contractor may sub-contract the Works (but only to a maximum of 25 percent of the Contract Price) with the approval of the Employer's Representative. However, he shall not assign the Contract without the approval of the Employer in writing. Sub-contracting shall not alter the Contractor's obligations.

## **7 The site**

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

## **8 Instructions**

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

## **9 Extension of Completion Date**

- 9.1 The Employer's Representative shall extend the Completion Date if an occurrence arises which makes it impossible for completion to be achieved by the Intended Completion Date. The Employer's Representative shall decide whether and by how much to extend the Completion Date.

- 9.2 For the purposes of this clause, the following occurrences shall be valid for consideration;

Delay by: -

- (a) force majeure, or
- (b) reason of any exceptionally adverse weather conditions, or
- (c) reason of civil commotion, strike or lockout affecting any of the trades employed upon the Works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the Works, or
- (d) reason of the Employer's Representative's instructions issued under these Conditions, or
- (e) reason of the contractor not having received in due time necessary instructions, drawings, details or levels from the Employer's Representative for which he specifically applied in writing on a date which having regard to the date for Completion stated in the appendix to these Conditions or to any extension of time then fixed under this clause was neither unreasonably distant from nor unreasonably close to the date on which it was necessary for him to receive the same, or
- (f) delay on the part of artists, tradesmen or others engaged by the Employer in executing work not forming part of this Contract, or
- (g) reason of delay by statutory or other services providers or similar bodies engaged directly by the Employer, or
- (h) reason of opening up for inspection of any Work covered up or of the testing or any of the Work, materials or goods in accordance with these conditions unless the inspection or test showed that the Work, materials or goods were not in accordance with this Contract, or



- (i) reason of delay in appointing a replacement Employer's Representative, or
- (j) reason of delay caused by the late supply of goods or materials or in executing Work for which the Employer or his agents are contractually obliged to supply or to execute as the case may be, or
- (k) delay in receiving possession of or access to the Site.

## **10 Management Meetings**

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

## **11 Defects**

- 11.1 The Employer's Representative shall inspect the Contractor's work and notify the Contractor of any defects that are found. Such inspection shall not affect the Contractor's responsibilities. The Employer's Representative may instruct the Contractor to search for a defect and to uncover and test any Work that the Employer's Representative considers may have a defect. Should the defect be found, the cost of uncovering and making good shall be borne by the Contractor. However, if there is no defect found, the cost of uncovering and making good shall be treated as a variation and added to the Contract Price.
- 11.2 The Employer's Representative shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the Appendix to Conditions of Contract.
- 11.3 Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified by the Employer's Representative's notice. If the Contractor has not corrected a defect within the time specified in the Employer's Representative's notice, the Employer's Representative will assess the cost of having the defect corrected by other parties and such cost shall be treated as a variation and be deducted from the Contract Price.

## **12 Bills of Quantities/Schedule of Rates**

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

## **13 Variations**

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

## **14 Payment Certificates and Final Account**

- 14.1 The Contractor shall be paid after each of the following stages of Work listed here below (subject to re-measurement by the Employer's Representative of the Work done in each stage before payment is made). In case of lump-sum Contracts, the valuation for each stage shall be based on the quantities so obtained in the re-measurement and the rates in the Schedule of Rates.

- (i) Advance payment \_\_\_\_\_N/A\_\_\_\_\_ (percent of Contract Price,  
[after Contract execution] *to be inserted by the Employer*).

- (ii) First stage (*define stage*) 30% Payment less 10% retention amount after completion of 30% scope of works\_\_\_\_\_
- (iii) Second stage (*define stage*) 80% cumulative Payment less 10% retention amount after Completion 80% scope of Works\_\_\_\_\_
- (iv) Third stage (*define stage*) *100% cumulative payment plus 50% of the retained amount after completion of 100% of the scope of works(Substantial completion certificate should be attached)*
- (v) After defects liability period and upon submission of Completion certificate, the 50% retained amount shall be released.

14.2 Upon deciding that Works included in a particular stage are complete, the Contractor shall submit to the Employer's Representative his application for payment. The Employer's Representative shall check, adjust if necessary and certify the amount to be paid to the Contractor within 21 days of receipt of the Contractor's application. The Employer shall pay the Contractor the amounts so certified within 30 days of the date of issue of each Interim Certificate.

14.3 The Contractor shall supply the Employer's Representative with a detailed final account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer's Representative shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 30 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer's Representative shall issue within 21 days a schedule that states the scope of the corrections or additions that are necessary. If the final account is still unsatisfactory after it has been resubmitted, the Employer's Representative shall decide on the amount payable to the Contractor and issue a Final Payment Certificate. The Employer shall pay the Contractor the amount so certified within 60 days of the issue of the Final Payment Certificate.

14.4 If the period laid down for payment to the Contractor upon each of the Employer's Representative's Certificate by the Employer has been exceeded, the Contractor shall be entitled to claim simple interest calculated pro-rata on the basis of the number of days delayed at the

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

## **15. Insurance**

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

## **16. Liquidated Damages**

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

## **17. Completion and Taking Over**

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

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

## **18. Termination**

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

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

18.2 If the Contract is terminated, the Contractor shall stop Work immediately, and leave the Site as soon as reasonably possible. The

Employer's Representative shall immediately thereafter arrange for a meeting for the purpose of taking record of the Works executed and materials, goods, equipment and temporary buildings on Site.

## **19. Payment Upon Termination**

- 19.1 The Employer may employ and pay other persons to carry out and complete the Works and to rectify any defects and may enter upon the Works and use all materials on Site, plant, equipment and temporary works.
- 19.2 The Contractor shall, during the execution or after the completion of the Works under this clause, remove from the Site as and when required within such reasonable time as the Employer's Representative may in writing specify, any temporary buildings, plant, machinery, appliances, goods or materials belonging to him, and in default thereof, the Employer may (without being responsible for any loss or damage) remove and sell any such property of the Contractor, holding the proceeds less all costs incurred to the credit of the Contractor.
- 19.3 Until after completion of the Works under this clause, the Employer shall not be bound by any other provision of this Contract to make any payment to the Contractor, but upon such completion as aforesaid and the verification within a reasonable time of the accounts therefor the Employer's Representative shall certify the amount of expenses properly incurred by the Employer and, if such amount added to the money paid to the Contractor before such determination exceeds the total amount which would have been payable on due completion in accordance with this Contract, the difference shall be a debt payable to the Employer by the Contractor; and if the said amount added to the said money be less than the said total amount, the difference shall be a debt payable by the Employer to the Contractor.

## **20. Corrupt Gifts and Payments of Commission**

- 20.1 The Contractor shall not;
- (a) Offer or give or agree to give to any person in the service of the Employer any gifts or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract with the Employer or for showing or forbearing to show favor or disfavor to any person in relation to this or any other contract with the Employer.
  - (b) Any breach of this Condition by the Contractor or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the Contractor) shall be an offence under the Laws of Kenya.

## **21. Settlement of Disputes**

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

### **APPENDIX TO CONDITIONS OF CONTRACT**

Sub Clause	Condition	Data
1.1	The Employer	<i>Coast Water Services Board</i> P.O. Box 90417-80100, Mombasa Mikindani off- Nkrumah Road
1.1	Name of Employer's Representative	Jacob K. Torutt Title: Chief Executive Officer <i>Coast Water Services Board</i> P.O. Box 90417-80100, Telephone: 041-2315230 Email: info@cwsb.go.ke
	Scope of Works	1) Site identification and Borehole hydrogeological survey 2) Drilling and development of borehole 40m depth 3) Equipping of borehole 4) Construction of 6m steel tower and installation of 10,000l plastic tank 5) Plumbing and construction of Yard Tap
1.1	Start Date	<i>14 days after contract signature.</i>
1.1	Intended Completion Date	3 Calendar Months from the start date
1.2(f)	Major Items of Construction equipment Owned	The essential equipment to be made available for the Contract by the successful Tenderer (proposals for timely acquisition or own, lease, hire, etc) shall be: 1) Drilling Rig 2) Normal tools for excavation and pipe laying. (e.g. hand tools, welding machines, wheelbarrows, spades etc 3) Excavator - 1no 4) Concrete Mixer – 2no. 5) 7 Ton Lorry- 2 no. 6) Pick up-----2 no.

1.2(g)	Qualifications and experience of Key site management and technical personnel	<ol style="list-style-type: none"> <li>1) Site Manager with a Bsc Civil or Water Engineer with at least 10years' experience on works of a similar nature.</li> <li>2) Surveyor with at least 3 years' experience in Civil Works Mason grade 1 with at least 3years' experience in Masonry works.</li> <li>3) Inspector of water works with 3 years' experience in water works.</li> <li>4) A Pipefitter grade 1 with 3 yrs experience in pipefitting.</li> </ol>
2.1	Documents that form part of the Contract.	<ol style="list-style-type: none"> <li>1) Agreement,</li> <li>2) Letter of Acceptance,</li> <li>3) Contractor's Tender,</li> <li>4) Conditions of Contract,</li> <li>5) Specifications,</li> <li>6) Drawings,</li> <li>7) Bills of Quantities or Schedule of Rates</li> </ol>
7.1	Site Possession Date	Shall be at Contract signature date.
7	Site Location as Defined by Drawings	Portreitz Special School, Road a distance of about 10 km from Mombasa Island.
11	Defect Liability Period	180 days
	Amount of Tender Security	<b>Kshs 100,000</b> issued by a reputable <b>BANK or PPOA approved Insurance Company</b>
	Tender Submission Address	<b>Chief Executive officer, Coast Water Services Board, Mikindani Street off-Nkrumah, Mombasa</b>
	Tender opening Date	<b>8<sup>th</sup> January 2018 at 12:00PM</b>
	Performance Security	<b>0.2 Million Against a Bank Guarantee from a Reputable 'BANK'</b>
15.1	Insurance	<ol style="list-style-type: none"> <li>1) The minimum insurance covers shall be: <ol style="list-style-type: none"> <li>(a) Loss of or damage to the Works,Plant, and Materials: Contract price</li> <li>(b) Loss of or damage to Equipment: Contract Price</li> <li>(c) Loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the</li> </ol> </li> </ol>

		Contract: Kshs 50,000; and  (d) Personal injury or death Kshs 50,000 for one incident, number of incidences unlimited.
16.1	Liquated Damages	<b>0.001 per cent</b> of the Contract price per day



**SECTION IV – SPECIFICATIONS, DRAWINGS AND BILLS OF  
QUANTITIES/SCHEDULE OF RATES**



# I. SPECIFICATIONS

## ON-SITE INSPECTION

Whether or not the Engineer calls for Third Party Inspection, all pipes and fittings shall be inspected upon arrival at the pipe storage areas for damage to:

- the pipe itself
- external coatings (if any)
- internal linings (if any)
- jointing surfaces (incl. sockets if any)

The Contractor shall be responsible for and shall undertake any work required by the Third Party Inspector or by the Engineer or his Representative as appropriate or where necessary, replace defective pipes and fittings deemed. All expenses in connection with such remedial works or replacements shall be deemed covered by the Tender.

## HANDLING FROM STORAGE TO TRENCH

All pipes shall be handled from storage to trench in accordance with the manufacturer's recommendations.

The Contractor shall obtain and keep on Site all the manufacturer's literature relating to the proper handling, storage, laying, and installation and testing of their products and shall make them or copies thereof available to the Engineer on Site.

## ON SITE PROTECTION FOR FERROUS PIPEWORK

Where specifically called for, final application of bituminous paint coat to SSRN 239 and/or a polythene sleeve to SSRN 227 shall be applied to the pipe before laying.

Where a concrete surround is to be applied (e.g. road/track under-crossing), then prior to laying, the pipe must be wrapped by an approved petrolatum tape or alternatively polythene-sleeved to SSRN 227 to the Engineer's satisfaction.

No separate payment will be made for any site protection to be given to the pipework.

## WORKING WIDTH

Where pipelines are within 20 metres of a motorable track, or through light bush or thicket a wayleave clearance of 2 metres plus nominal bore of pipe will be allowed. Where pipelines are through dense bush, thicket or forest a wayleave clearance of five metres plus nominal bore of pipe will be allowed. Payment for Site Clearance will be based upon this width except that the Engineer reserves the right to restrict this width due to the presence of obstructions, roads, houses and the like. Payments will then be according to the actual area cleared. No claims for additional space nor for inconvenience and the like caused by obstructions, will be allowed.

## TRENCH EXCAVATION AND EARTHWORKS

Section 2 - Special Specifications for Earthworks shall apply except for thrust boring as specified in Clause 551.

## PIPE LAYING

- (a) Pipes generally shall be laid and jointed in accordance with the manufacturer's instructions. Extra excavation must not be carried out so as to avoid backfill, excessive deviation in joints and other irregularities. Otherwise, the pipe grade will follow the Drawings, with a continuous (but not necessarily uniform) fall towards washout-valves and rise towards air- valves.
- (b) Prior to laying, damage to linings or coatings shall be repaired in accordance with the manufacturer's instructions and this will be the Contractor's liability. Where, in the opinion of the Engineer or his representative, the damage to a pipe coating is significant and notwithstanding the repairs made in accordance with the manufacturer's instructions, the complete pipe shall be further protected by a polythene sleeve. The sleeve shall conform to SSRN 227 and be of minimum thickness of 200 microns. It shall be strapped beyond the joints of adjoining pipes using a non-metallic strap. All costs of supply and installation of such additional protection shall be to the Contractor's account.
- (c) Every pipe shall be laid separately and shall bear evenly upon the solid ground or concrete for its full length, holes to receive sockets, couplings or flanges being cut in the bottom of the trench of such size and depth as to allow the joints to be properly made. The pipes shall be laid to true invert, straight lines and falls, each pipe being separately boned between sight rails. Before lowering into the trench or placing in position each ductile iron pipe or casting shall be slung and sounded with a mallet to test for hair cracks. Pipes that do not ring true will be discarded. The Pipes shall be thoroughly brushed inside and outside prior to laying and no foreign matter shall be allowed to enter the pipe during or after laying.
- (d) Trenches shall be bottomed up only immediately in advance of pipe laying, although at least 15 metres shall be prepared in advance of any given pipe. Trenches and joint holes shall be kept free from water, until the pipes are laid and the joints completed and no ground water shall be allowed to enter the new pipes.
- (e) In rock excavation, the pipes shall be bedded on concrete or selected granular fill, e.g. sand, to a minimum thickness of 150 mm and the exclusion of rocks and other hard material to at least 300 mm around the pipe, leaving proper joint holes and subsequently making good with selected materials to the Engineer's approval.
- (f) All flanged joints shall be made with jointing rings, which shall be carefully inserted concentric to the bore of the pipe, so that undue stresses shall not be caused in any of the bolts or on the flanges when bolting up. The joint ring shall be compressed gradually and evenly by taking a few turns on each diagonal bolt in succession.
- (g) Mechanical joints shall be made in accordance with the manufacturer's instructions. After successful testing of pipelines, the joints will receive external protection to the Engineer's approval.
- (h) The threads of any screw connections shall be coated with red lead before the joint is made.
- (i) Concrete anchor blocks shall be provided at bends, tees, stopped ends, etc as shown on the drawings or as directed by the Engineer.
- (j) Where a pipeline crosses roads or railway lines, the pipe shall be sleeved or surrounded with concrete as instructed by the Engineer, and Tenderers shall have been deemed to have made allowance in their rates for compliance with the requirements of the relevant authority.
- (k) For the insertion of valves and other fittings into existing pipelines, pipes may need to be cut. Approved tools and machines specially made for the purpose, shall be provided and used by the Contractor.
- (l) The Contractor shall provide and fix wooden drumheads to the open ends of the mains, and similar drumheads shall be used to close the ends of any pipes to exclude dirt and stones, etc. when the pipe laying is not actually in progress. Wooden markers properly inscribed, shall be left projecting out of the ground to indicate the ends of all pipes, where these are buried in the ground in open country. In public highways, a danger sign or other suitable means as approved by the Engineer shall be adopted.

- (m) At every point of loading or unloading, pipes must be handled by approved lifting tackle. (Unloading by rolling them down planks of any form or including ramp will not be allowed except with the special consent of the Engineer).
- (n) The stacking of pipes shall be used such as to prevent damage during storage. Timber runners shall be laid to keep the upper row separated from the lower and the bottom row shall be staked to prevent any rolling. The whole arrangement shall be subject to the approval of the Engineer.
- (o) Care should be taken to minimise the risk of bush fires damaging any pipes deposited along the line of the mains.

## **HYDROSTATIC TESTING OF PIPELINES**

After laying, new pipelines shall be tested under pressure and where in trench, such tests shall be made before it is completely back-filled. During the test, all joints shall be clear of earth, timber, etc to allow visual inspection. Testing shall commence when not more than 20% of all pipework has been laid and at no time may there be more than 20% untested.

Where old pipelines that are yet to be taken into service are involved they shall be similarly tested, except that the Engineer may specify at what stage testing is required.

The pipeline shall be tested in lengths between valve locations or in such shorter lengths as the Engineer may approve on the understanding that no extra cost will be incurred to the Employer but the maximum length of main to be tested, shall not normally exceed 1.0 km.

The Contractor shall supply all necessary materials to carry out the test in accordance with the requirements including force pumps, water pressure gauges, including tools for the use of the Engineer, interconnecting pipework, feeding tank, blank flanges, temporary stop-ends, struts and water for the test. The test section shall be capped or flanged off at each end and all branches. Testing shall not take place against closed valves.

For a pipeline incorporating flexible joints, testing shall not commence until after all the permanent anchor blocks along the pipeline have been constructed and soil around them backfilled and compacted. Capped or flanged ends along the pipeline shall also be anchored adequately to withstand the force due to test pressure. The Contractor shall submit his proposals for temporary anchoring to the Engineer for approval.

After the main has been clear of debris, and all necessary stop-ends and gauges fitted to the Engineer's approval, the Contractor shall fill up the pipe with water free from silt, and sand and grit and bring up the pressure steadily to the nominal pressure of the pipe or incorporated fittings, whichever is the lesser, (except for old pipelines where a lower value may be specified by the Engineer), and maintain it with a force pump for 24 hours.

The pressure shall then be increased steadily in increments of 1.0 kg/cm<sup>2</sup> with a pause of one minute between each increment to the specified test pressure for the section. Unless otherwise specifically mentioned, the applied test pressure shall be measured at the lowest point along the section being tested.

Where test pressure has not been specified, it shall be assumed to be 1.50 times the rated nominal pressure (PN) of the pipe.

After a period of half an hour, the fall in test pressure shall be recorded and sufficient water again pumped into the line under test to bring the pressure back to the test pressure. The procedure shall be repeated every half-an-hour for a total period of 3 hours, or longer, if the Engineer so directs, and the amount of water pumped in recorded.

The rate of leakage shall be calculated from the amount of water pumped in during testing and if it is less than 1 litre of water per 10 mm diameter of pipe per km of length of pipeline, for each 24 hours and for every 30 m head, the pipeline will be considered to have passed the test.

Leaks exceeding permissible amounts shall be made good. And faulty pipes, fittings, and specials, shall be replaced by the Contractor at his own expense and the section tested again before approval is given for backfilling. Payment for the section will not be certified, until the test has been passed and backfilling

completed.

### **MEASUREMENT FOR PIPELAYING**

Pipe laying and jointing where in trench is included in the Bill of Quantities with excavation, backfilling, and temporary reinstatement, all as described in the Bills of Quantities. Measurement of the work done will be along the centre-line of junctions in the pipe network, and branches, unless otherwise indicated in the Bills of Quantities.

### **FLUSHING AND STERILISATION**

This shall be done in accordance with the recommendations set out in SSRN 651.

All pipework shall be flushed and cleaned and all treated water pipework shall additionally be sterilised. The rates inserted are to be for the flushing and sterilising, and where appropriate for cleaning shall be inclusive for, sampling, testing and inclusive of the reports on the bacteriological quality of water.

### **CONCRETE PROTECTION**

Unless otherwise provided in the Special Specification or Bills of Quantities or directed by the Engineer, a 0.15 m concrete surround shall be provided to water mains in the following circumstances:-

- (a) Water mains with less than 0.6 m or more than 6.0 m of soil cover over the pipes.
- (b) Water mains under carriageways if depth of soil cover is less than 1.30 m
- (c) In the places where shown on the Drawings or directed by the Engineer. All concrete for beds and surrounds shall be class 15 concrete.

Alternatively under carriageways and where indicated on the drawings, the pipeline shall be laid in a stepped trench with the immediate surround backfilled with approved granular material and then across the step shall be laid precast reinforced concrete slabs of class 25 concrete.

The unit of measurement shall be cubic metre or linear metre as indicated in the Bills of Quantities.

The rate shall include for the provision, transporting and placing of concrete, all strutting and formwork, protection and curing and all labour, tools, plant, supervision overheads and profit.

### **ANCHOR BLOCKS**

Pipelines with mechanical (or flexible) joints shall be adequately anchored at bends, tees, sluice or butterfly valves, tapers, blank ends, etc. Anchor blocks shall be constructed from Class 20 concrete to the dimensions indicated on Drawings unless otherwise directed by the Engineer. Support blocks shall be constructed from Class 15 concrete. Soil around anchor blocks shall be compacted thoroughly before the hydraulic testing of the pipeline. Payment for anchor blocks will be per unit volume of concrete in the blocks and shall include for all the earthwork, formwork and other operations required for their construction. No separable payment shall be made for any temporary or permanent anchor blocks constructed by the Contractor specifically for the testing of the pipeline.

Anchor and Thrust blocks at proposed tie-in points will be cast at least 7 days prior to the proposed tie-in works and post tie-in pipeline testing for the affected section. The proposed tie-in works described in Clause 552 will therefore be preceded by the required anchor/thrust block casting.

### **INDICATOR PLATES AND MARKER POSTS**

Precast concrete indicator plates to the dimensions indicated on the Drawing shall be installed at all sluice valves, single-air valves, double air valves, fire hydrants and washouts, with letters SV, AV, FH, WO, respectively, indented in them. The plates shall be painted with at least two coats of all-weather plastic emulsion paint of approved colour.

Marker posts to the dimensions indicated on Drawings shall be installed at 100 m spacing along the pipelines installed in open country or as directed by the Engineer. Marker posts shall be painted with at least two coats of all-weather plastic emulsion paint of approved colour.

#### **INSTRUCTIONS FOR SITE REPAIR OF DAMAGE TO COATING AND/OR LINING OF STEEL FITTINGS**

Site repair to the coating or lining of pipes and steel fittings of existing pipes shall be carried out as detailed below to the satisfaction of the Engineer.

- (a) Pipes and fitting coated externally shall first have the damaged areas and its surround cleaned (by wire brushing) and dried. The damaged area and surrounding coating shall then be painted with coal tar or bituminous solution so as to leave no bare metal exposed. The type of solution used for painting will depend upon the original coating applied to the affected pipes and fittings and must be compatible with the original coating.
- (b) Pipes and fittings sheathed externally shall first be holiday detected, and then like the coated ones mentioned in (a), have the damaged area or 'holiday' cleaned and dried to remove all whitewash from the surrounding sheathing by wire brushing. Where the sheathing reinforcement has been damaged in any way or where the sheathing has separated from the pipe wall, the affected sheathing shall be cut out in a neat rectangular or polygonal shape, the cut being made in sound and well bonded sheathing.

The exposed metal and its surrounding shall be thoroughly wire brushed and painted with Type B (fast drying) primer to SSRN 221.

The enamel for affecting the repair shall be heated in sufficient quantities, in a pot or boiler fitted with an efficient thermometer, until it all melts and to a temperature recommended by its manufacturer. The enamel shall be stirred during melting to prevent overheating and charring and ensure the filler does not settle. Only sufficient enamel shall be melted at any one time since the enamel must under no circumstances be reheated.

The damaged area and its surrounding shall be gently heated using a gas torch or blow lamp. The area will then be flood coated. Where the sheathing reinforcement has been cut out a new patch of fibreglass reinforcement shall be applied to overlap the original sound sheathing and the area shall be flooded with hot fluid enamel in such a way that the thickness of the original sheathing is maintained and no metal is left exposed. The repaired area shall then upon drying, be painted with whitewash.

The efficiency of the repair shall be checked using a holiday detector operated at a voltage of not less than 12000 V and not greater than 14000 V.

Should the repairs prove to be unsatisfactory in any way the Contractor shall undertake afresh the repairs to the satisfaction of the Engineer.

- (b) Pipes and fittings with enamel lining will have the following procedure taken for their repair:-
  - (i) Where the internal enamel lining has been damaged, crazed or cracked the surface of the lining shall be heated using a gas torch or blow lamp sufficiently to allow the lining to flow and fill in the cracks or damaged portions. Where the damage is more extensive, a suitably shaped iron shall be used to produce a smooth finish.
  - (ii) Where small areas (n.e. 200 sq.cm) have loosened or entirely detached from the pipe or fitting, the affected area shall be cut out in a neat rectangular or polygonal shape ensuring the cut is made through sound and well bonded lining. The damaged area shall then be prepared for priming and flood coating in a similar manner as that for damages described under (a) and (b) above. The repaired lining shall be to the same contour and thickness as the original lining.
  - (iii) Where larger areas of enamel lining have become entirely detached or disembarked from a pipe or fitting, the pipe or fitting (or portion of pipe) shall, at the discretion of the Engineer, be discarded.
  - (iv) No repair to any damaged or cracked area shall be permitted in pipes less than 550 mm nominated diameter where the damaged area extends for more than 1 metre from the end of the pipe or the cut end where tie-in works are to be effected.

- (c) Pipes and fittings with concrete or cement mortar lining shall be thoroughly cleaned and dried prior to any repair works. Any cracks or chips in the concrete or cement mortar lining shall likewise, be cleaned and freed of loose materials, dust or any other deleterious matter.

The repair shall be effected using an approved epoxy resin mortar that shall be applied in accordance with SSRN 215.

- (d) New pipes and fittings with epoxy coating or lining shall be repaired in accordance with the manufacturer's specifications prior to laying to the complete satisfaction of the Engineer. If so required by the Engineer this shall be carried out and at no additional cost under the site supervision of the manufacturer.

#### **COMPLETION OF EXTERNAL PROTECTION AT JOINTS ON SHEATHED PIPELINES**

The completion of the external protection at the joints on sheathed pipes and fittings shall be carried out by one of the methods as detailed below as appropriate and shall be to the satisfaction of the Engineer. The costs thereof shall be deemed to be allowed for within the Tender.

In all cases where the pipe joint has involved the use of nuts and bolts, the exposed threads of every bolt shall first be thoroughly cleaned and then coated with an approved zinc-rich paint allowed to dry for not less than 24 hours before proceeding with the further protection.

- (a) Above ground pipelines and fitting and in backfilled trenches Bolted by Flexible Couplings (Moulding Method)

Where exposed ends of steel pipes have not been factory coated with epoxy as indicated in Clause 504 (b) or the flexible couplings have not been factory epoxy coated then the external protection to sheathed pipes and fittings jointed by mechanical couplings shall be completed by moulding the couplings with an enamel composition compatible with the enamel used for the pipe sheathing i.e. a bituminous composition shall be used on pipes and fittings sheathed with bitumen (asphalt) enamel, and a coal tar composition shall be used on pipes and fittings sheathed with coal tar enamel.

The assembled coupling shall be thoroughly cleaned (including removing whitewash from that portion of the sheathing adjacent to the joint) and dried together with that portion of the pipe that will come within the moulding box and the whole shall be painted with the quick drying primer supplied.

The inside of the moulding box and externally around the pouring gate shall be coated with a thick wash of lime of similar material to prevent any possibility of the moulding box sticking, and shall be dried thoroughly.

The moulding box shall be fitted around the coupling so that the pouring gate is at the top and the flanges and bolts of the coupling sit centrally in the recesses provided for them in the moulding box. The clip or bolts of the box shall be fitted and tightened and all joints sealed, including the joints between the box and pipes, with clay or similar material to prevent the hot composition from running out.

The enamel composition shall be heated in an approved boiler (to be provided by the Contractor complete with an accurate thermometer) to the temperature recommended by the supplier, and stirred during melting to prevent overheating and the filler settling to the bottom.

The fluid enamel composition shall be slowly poured (at the temperature recommended by the supplier), taking care to prevent air-locks, until the gate is filled. The gate shall be kept filled by toppling up as necessary to allow for cooling shrinkage.

The moulding box shall be removed as soon as it is cool enough to handle by which time the enamel will have set. The moulding may be cooled with water to make the enamel set more quickly.

Any defective part of the moulding shall be immediately repaired by applying hot enamel composition with a trowel.

It may be necessary to support the moulding box on larger diameter sheathing pipes to avoid the box from sinking into the pipe sheathing which may have become softened by the hot enamel in the



box. The moulding box must be re-coated with lime wash before being re-used.

The Contractor shall provide all other materials required for completion of external protection by the moulding method.

(b) Where pipes and fittings are to be concreted in (Wrapping Method)

The external protection to pipes and fittings jointed by flanged joints, "Tyton", type or Bolted Gland joint, or similar shall be completed by wrapping the joint with approved petrolatum tape prior to which the area shall have been cleaned by an approved proprietary paste and the area protected by an approved proprietary mastic. It shall then be wrapped in uPVC 'outer wrap' or similar material. Mechanical couplings may be similarly protected.

The whole joint shall be thoroughly cleaned removing all loose rust and extraneous matter and the approved paste rubbed well over the whole of the joint and for a few centimetres either side of the joint over the pipe sheathing. A liberal amount of paste shall be left around all bolt heads, narrow cavities, etc.

The approved mastic shall be applied to cover all bolt heads and nuts, forced into the annular gap between the spigot and socket in the case of 'Tyton' type or bolted gland joints, formed as a triangular fillet against the face of socket or flanges and filled in all gaps and abrupt change in contour to provide an even contour for wrapping.

The approved tape shall be applied circumferentially, starting and finishing at the top of the joint care being taken to smooth and eliminate any air pockets and to form the tape well into all angles and changes in contour. The tape should extend on to the pipe sheathing on either side of the joint by at least 50 mm and the tape should be applied with a minimum overlap of 25 mm.

An outer wrapping of 'PVC OUTERWRAP' shall be finally applied over the approved tape'. This wrapping should extend at least 50 cm on to the pipe sheathing and should be applied with a minimum lap of 50 mm.

All the above-mentioned materials shall be provided by the Contractor and deemed covers in his rates.

#### **PROTECTION TO FLEXIBLE COUPLINGS AND FLANGE ADAPTORS IN CHAMBERS AND/OR ABOVE GROUND**

Such mechanical joints e.g. flexible couplings, flange adaptors, etc. in chambers and/or above ground should first be cleansed by brushing away soil and then shall have a primer applied around the component. Moulding around the component shall be with an approved mastic blanket to provide a contour suitable for wrapping the component with an approved petrolatum anti-corrosion tape suitable for tropical climates which shall be done so as to achieve a clean and neat good tape finish.

#### **PROTECTION TO FLEXIBLE COUPLINGS AND FLANGED ADAPTORS FITTED TO EPOXY COATED PIPE SPIGOTS.**

Where factory coated flexible couplings have been used on pipes whose exposed surfaces beyond other protection materials have been factory protected using epoxy, then such joints shall be site protected by a polythene outer wrap sheathing of minimum thickness 200 microns that shall extend beyond the pipe epoxy coating by at least 50 cm. This outer wrap shall be double strapped using a non-metallic strap to each pipe end beyond and not to the epoxy coating.

#### **BURSTING DISCS AND BURSTING DISCS DEVICES**

Bursting discs and bursting disc devices shall be in general accordance with SSRN 233. A minimum pack of 5 such bursting discs shall be provided with each bursting disc device.

#### **IN-SITU WELDING OF STEEL FITTINGS AND FLANGES**

Wherever it is necessary to undertake in-situ welding of steel fittings and flanges the work shall be undertaken under cover, temporary or otherwise. Outside of buildings, the cost of providing such cover

shall be deemed included in the Contractors rates. Only suitably qualified welders shall be employed.

Welding procedures used shall comply with SSRN 670.

Prior to deployment of any welder he shall within the preceding 3 months have satisfactorily undergone an 'approved testing' in accordance with SSRN 671 and certification thereof shall be provided to the satisfaction of the Engineer. Each welder deployed shall at intervals of not more than 6 months undergo similar approved retesting and only those who pass such retesting will be allowed to continue to undertake the in-situ welding works.

All testing and retesting will be deemed to be covered in the Contractors rates.

## **PIPE SUPPORTS**

Pipe supports shall meet the requirements of SSRN 406

## **HIGH DENSITY POLYETHYLENE (HDPE) PIPES AND FITTINGS**

HDPE pipes and fittings shall meet the requirements of SSRN 415 and 416 respectively. They shall be transported, laid, jointed and backfilled in accordance with the manufacturer's written instructions.

For diameters up to and including 110 mm they can be supplied in coils of up to 100 m long. For coils of diameters greater than 63 mm shall be supplied with each layer bound separately to facilitate safe unwinding. For diameters from 125 mm upwards they shall be supplied in lengths not exceeding 12 m. Installation – including fusion jointing work on HDPE pipelines – must be directed and supervised by suitably qualified and experienced persons and the Contractor shall have demonstrated his ability to provide this in his Tender.

Before transporting HDPE pressure pipes the loading surface of the vehicle must be cleaned and free from projecting nails, screws or other sharp objects. The bottom layer of all pipes must as far as possible be in contact with the loading surface throughout their entire length and not project beyond it. The pipes must be secured from slipping and shall not be pulled over sharp edges when loading and offloading. Pipes shall not be dragged along the ground.

Pipes, fittings and coils shall be stored in such a way that they are completely protected from direct sunlight. When covered they must be well ventilated to avoid accumulation of heat and resultant deformation. Transparent coverings shall not be used. The storage location shall be flat and shall, for pipes, support the pipes throughout their length.

Stones and sharp objects shall not be present. Pipes shall not be stacked to a height exceeding 1 m. The pipes must be secured at the sides to prevent them from rolling. Contact with harmful materials shall be avoided. As far as possible, coils shall be stored in a horizontal position. The area shall be free of stones and sharp objects. If stored upright they must be secured to avoid tilting.

Prior to laying in trench the bed of the trench must provide support throughout the entire length of the pipe. The pipe shall not be laid directly on cohesive, rocky or stony soil. Such material shall be over excavated to a depth of not less than 0.1 m and shall be removed and replaced by non-cohesive soil or a special pipe support. This shall initially be re-compacted and then the surface loosened on the day of and prior to laying.

Pipes supplied in coils and of up to 63 mm diameter may be unrolled with the coil in the vertical position. For larger diameters an unwinding device shall be used. A turnstile can be used with the coil laid in a horizontal position on it or with the coil mounted vertically on a slow moving lorry. The pipe shall never be removed from a coil in a spiral manner as this may cause kinking. Should kinking nevertheless occur the Contractor shall cut the pipe on either side of the kink, prepare the ends, and then use an approved joint after laying. All costs of dealing with kinking shall be to the Contractors expense. A minimum bending radii of 35 x the diameter shall be observed.

## **GLASS REINFORCED POLYESTER (GRP) PIPE**

Scope

This specification applies to the furnishing of all labour, materials and services in connection with the manufacture, testing, delivery and installation of large diameter underground glass reinforced plastic piping, joints, fittings and specials as specified in the engineering documents and drawings.

#### Codes and Standards

All pipes, joints and fittings supplied under this specification shall, as a minimum, meet the requirements of the AWWA C950, AWWA Standard for Fibreglass Pressure Pipe, and ASTM D3517, Standard Specification for "Fibreglass" (Glass-Fibre Reinforced Thermosetting-Resin) Pressure Pipe, for pressure pipes and ASTM D3262 Standard Specification for "Fibreglass" (Glass Fibre-Reinforced Thermosetting Resin) Sewer Pipe, in the case of gravity sewer pipes and ASTM D3754 Standard Specification for "Fibreglass" (Glass Fibre-Reinforced Thermosetting Resin) Sewer and Industrial Pressure Pipe for pressurised sewer and industrial waste pipes.

#### Test Methods

- ASTM D638 Standard Test Method for Tensile Properties of Plastics.
- ASTM D1586 Standard Method for Penetration Test and Split-Barrel Sampling of Soils.
- ASTM D2290 Standard Test Method for Apparent Tensile Strength of Ring or Tubular Plastics and Reinforced Plastics by Split Disk Method.
- ASTM D2412 Standard Test Method for External Loading Properties of Plastic Pipe by Parallel- Plate Loading.
- ASTM D2487 Standard Test Method for Classification of Soils for Engineering Purposes.
- ASTM D2583 Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor
- ASTM D 2 9 9 2 Standard Method for Obtaining Hydrostatic Design Basis for "Fibreglass" (Glass- Fibre Reinforced Thermosetting Resin) Pipe and Fittings.
- ASTM D3567 Standard Method Determining Dimensions of "Fibreglass" (Glass- Fibre Reinforced Thermosetting Resin) Pipe and Fittings.
- ASTM D3681 Standard Test Method for Chemical Resistance of "Fibreglass" (Glass-Fibre Reinforced Thermosetting Resin) Pipe in a Deflected Condition.
- ASTM D3754 Standard Specification for "Fibreglass" (Glass Fibre-Reinforced Thermosetting Resin) Sewer and Industrial Pressure Pipe
- ASTM D5365 Long- Term Ring Bending Strain of Fibre Glass (Glass-Fibre Reinforced Thermosetting Resin) Pipe.

#### Product Standards

- ASTM D3754 Standard Specification for "Fibreglass" (Glass Fibre-Reinforced Thermosetting Resin) Sewer and Industrial Pressure Pipe
- ASTM D4161 Standard Specification for "Fibreglass" (Glass-Fibre Reinforced Thermosetting Resin) Pipe Joints Using Flexible Elastomeric Seals.

#### Product Description Materials:

- Only approved polyester resin systems for which documented performance is available shall be used in this particular application. The data shall have been acquired from a composite material of similar construction and composition as the product proposed for this project.
- The reinforcing glass fibres to be used to manufacture the components shall be of highest quality commercial grade of glass filaments suitably treated with binder and sizing compatible with impregnating resins.
- Silica sand or other suitable materials may be used as fortifiers in the laminates.
- Resin additives, such as pigments, dyes and other colouring agents, if used, shall in no way be detrimental to the performance of the product nor shall they impair visual inspection of the finished product.
- Elastomeric sealing rings must be supplied by recognised, acceptable, quality manufacturers. The

elastomeric compound used must be approved for use in potable water systems.

#### Manufacture and Construction

- The pipes shall be supplied in accordance with the diameters and tolerances specified in “Dimensions”. They shall be manufactured by a controlled, reproduction process using the materials described in the PGRP 3.1 to result in corrosion resistant, composite structure to meet the operating conditions for the pipe classes as specified on the drawings. Stiffening ribs may be used to increase the overall pipe stiffness.
- Plain-ended pipes shall be field connected with glass reinforced plastic sleeve couplings that utilise elastomeric sealing rings as the sole means to maintain joint water- tightness. Spigot and socket pipes shall be field connected using the bell and spigot joint with double O-ring and pressurisation socket. The joints must meet the performance requirements of ASTM 3754 and ASTM D4161.
- Flanges, bends, reducers, tees of various descriptions, wyes and other fittings shall be Grade B mild steel. Couplings shall be GRP collars or VI couplings or a combination of the two with the ends fabricated to suit the contractor's requirements.

#### Dimensions

- Pipes will be supplied in accordance with the nominal diameters as shown on the longitudinal section drawings or in the Schedule of Quantities.
- Pipes shall be supplied in accordance with an OD series.
- Pipes shall be supplied in 12 metre lengths, + 25 mm.
- Other section lengths may be supplied for special orders, subject to the Engineer's approval. A maximum of 10% of the pipe sections may be supplied in random lengths, again subject to the approval of the Engineer.
- The minimum average wall thickness shall be the thickness as stated. The minimum single point thickness shall not be less than 87.5% of the stated thickness.
- All pipe ends shall be square to the pipe axis + 6 mm or 0.5% of the nominal diameter, whichever is the greater.
- The tolerance of the angle of a bend and the angle between the main and a leg of a wye or tee shall be 2 degrees. The tolerance on the laying length of a fitting shall be 50 mm.

#### Product

Pipes shall be supplied to the minimum initial specific stiffness of SN 5000. Pressure class shall be PN 25.

#### Qualification Testing

The physical properties and characteristics of the pipes shall be determined by prototype testing of the manufactured product. These tests need not be conducted specifically for this project if prior tests on similar products have been previously completed. Testing may be conducted on one diameter and extrapolated to other diameters if the pipes are of similar composition and material arrangement and are manufactured from the same materials specification using a similar process.

All prototype tests results must be retained by the manufacturer and be available for inspection by the purchaser or his representative upon request.

The Hydrostatic Design Basis (HBD) will be obtained in accordance with procedure B of ASTM D2992, being established at an extrapolated 50-year value.

The long-term ring bending strength (Sb) will be determined in accordance to ASTM D5365 for water projects. The ambient test temperature for maximum operating temperatures not to exceed 50 degrees C. Minimum values for Sb, expressed as relative pipe deflection, are 12% for SN 5000

Coupling joints shall be qualified per the tests of Section 7 of ASTM D4161. Product Use

The maximum allowable operating temperature of the pipes shall be 50 degrees C.

The minimum allowable operating temperature of the pipes shall be -40 degrees C. The actual operating temperature shall range between 0 and 20 degrees C.

### Standard Installations

Glass Fibre Reinforced Pipes shall be installed in accordance with the Manufacturer's Installation Instructions. The minimum standard installation for each station and corresponding stiffness class based on this specification is SN 5000, 90SPD sand, full burial.

Unless otherwise noted, trenches shall be constructed in accordance with the dimensions given in the Standard Specification or as shown on the drawings.

### Quality Control Testing

Quality control testing on pipes shall be conducted in strict accordance with this specification. These tests will, as a minimum, cover:

- Raw materials
- Pipe stiffness
- Hydrostatic testing (as agreed with the Engineer)
  
- Load capacity
- Barcol hardness
- Critical dimensions
- Visual appearance

Adequate records must be kept by the manufacturer; such reports must be readily available for inspection by the Contractor, the Engineer or the Engineer's Representative. Quality control tests may be witnessed by the Contractor, the Engineer or the Engineer's Representative.

Raw materials for use in pipes covered in this specification shall be sampled and tested by the manufacturer prior to their use to ensure that they comply with the specifications in effect at the time of purchase. Any materials failing to meet the requisite standards shall immediately be rejected.

All materials shall be delivered with appropriate vendor certificates to demonstrate their compliance with the Manufacturer's specification.

Samples of pipe shall be tested for compliance with the pipe stiffness. The frequency of pipe ring samples shall be once per shift/machine or one per 100 pipes, whichever is the most frequent. If the one sample fails it should be retested. If it still fails, cut two (2) additional samples from the lot (from the preceding and following pipes). If they both pass, then the entire batch except the failed pipe is considered acceptable. If not as above, the pipes must be proven individually acceptable. Testing will be carried out in accordance with ASTM D2412, with the stiffness value rated at 5% deflection.

Hydrostatic Leak Testing Pipes shall be hydrostatically tested in accordance with section 3.1.1 of A WW A C950. The pressure class of pipes will be that specified. Any pipes failing to pass this test will be rejected. Rejected pipes may be repaired and retested; if they pass, they will be accepted

Tests shall be performed in accordance with the requirements of A WW A C950 and ASTM D3517 to check load capacity (or strength) in both the hoop and axial directions. One of each test shall be made per 100 pipes. Should samples fail to meet or exceed the stated values for each test, two additional samples shall be cut from the preceding and following pipes. If they both pass and the average of all three sets also passes, then the entire lot is considered acceptable.

Barcol hardness tests will be conducted in accordance with ASTM D2583. Pipes failing to reach the required level of cure will be rejected. Rejected pipes may be retested in accordance with this specification. If their cure at this time has reached the required standard, they will be acceptable.

Pipes will be measured for compliance with critical dimensions as specified in PGRP 3.3 including diameter, thickness, end squareness and length. Measurements will be made in accordance with ASTM D3567.

Checks on diameter will be made at each change of diameter manufactured. Tolerances will be such that joints meet the performance requirements of ASTM D3754 and ASTM D4161.

All pipes will be checked for compliance with thickness stated. The minimum average thickness must be greater than or equal to stated thickness. The minimum single point thickness must be greater than or

equal to 87.5% of stated thickness.

Any pipes with stepped ends shall be checked to ensure compliance with tolerances. All pipes will be measured to ensure compliance with the requirements.

The pipes shall be free from all defects, including delaminations, bubbles, pinholes, cracks, and pits, blisters, foreign inclusions, and resin-starved areas that, due to their nature, degree or extent, detrimentally affect the strength and serviceability of the pipe.

The pipe shall be as uniform as commercially practicable in colour, opacity, density and other physical properties.

#### Customer Inspections

The Contractor, the Engineer or the Engineer's Representative shall be entitled to inspect pipes or witness the pipe manufacturing and QC tests. Such inspection shall in no way relieve the manufacturer of the responsibility to provide products that comply with the applicable standards within this specification.

Should the Contractor, the Engineer or the Engineer's Representative wish to see specific pipes during any manufacturing stage, the manufacturer shall provide the aforementioned with reasonable advance notice of when and where the production of those specific pipes will take place.

Should the Contractor, the Engineer or the Engineer's Representative elect not to inspect the manufacturing, testing, or finished pipes, it in no way means that they have approved the products or tests.

#### Submittals to be given Before or at the Time of Tendering

At tender stage and in a covering letter, the Manufacturer, through the Contractor, shall, in addition to the items specified, provide sufficient data for the broad evaluation of his proposed pipe. This data shall include, a minimum, the following specific information:

- Details of the proposed pipe wall thickness and properties including Pressure Class and Stiffness
- Class.
- Details of joints.
- Hydrostatic testing plan.
- Exceptions
- Details for nesting and packaging of pipe together with methods for de- nesting and unpacking of pipes
- Instruction for the storage and handling of pipes and couplings
- Installation Instructions including inter-alia bedding requirements, backfilling procedures and proposals for measuring initial diametrical deflections.

#### **INDICATOR TAPES**

Indicator (marker) tapes shall be laid in the trench above all plastic pipes (PVC, HDPE, GRP, etc.) in order to facilitate location with a metal pipe detector at a later stage. Indicator tapes shall be made of pigmented low-density polyethylene and metal foil in a bright colour or other approved material not less than 100 mm wide and 0.15 mm thick.

#### **SURGE PROTECTION**

The Contractor shall compute and analyse the surge conditions which would be induced by sudden pump stoppage and valve closure in the transmission mains and allow in his rates and prices for the Plant, materials and services necessary for the calculations and the proposed protection system.

The tenderer shall provide summary computations and an outline of the measures he proposes to take for surge suppression in his tender. Such details are to be sufficient to demonstrate that the tenderer

understands the situation and has generally allowed for taking reasonable measures for surge protection.

On award of the contract the Contractor will provide detailed calculations and proposals for the Engineer's approval within 60 days of the start of the contract. The Engineer's approval shall not be unreasonably withheld, however the Contract rates and prices shall be deemed to include allowance for the execution of the works which meet the Engineer's approval.

**LOCATION OF UNDERGROUND SERVICES ETC.**

It shall be the Contractor's obligation when trenching, to locate and avoid the damaging of any existing services, be they water, drainage, sewage, electricity or telephone.

Notwithstanding this obligation and should damage occur, it will be the Contractor's further obligation at his own cost to urgently liaise with the utility organisation concerned and to bear the cost of the repair or replacement of the damaged article.

## **II DRAWINGS**

NOTE:

1. A list of the Contract Drawings should be inserted here
2. The actual Contract Drawings including Site plans should be annexed in a separate booklet



### **III BILL OF QUANTITIES/SCHEDULE OF RATES**

#### **Notes for preparing Bills of Quantities**

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

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

#### **Notes for preparing Schedule of Rates**

Where the time limit or other constraints do not allow the preparation of a Bill of Quantities for the Works, a lump-sum Contract shall be adopted and a Schedule of Rates (in place of a Bills of Quantities) shall be issued as part of the tender documents.

The objectives of the Schedule of Rates are;

- (a) to provide sufficient information on the nature of work items to be performed to enable tenders to be prepared efficiently and accurately; and
- (b) when a Contract has been entered into, to provide a basis for the pricing of Works executed for interim and final valuations.

In order to attain these objectives, Works should be itemized in the Schedule of Rates in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or other circumstances which may give rise to different

considerations of cost. Consistent with these requirements, the layout and content of Schedule of Rates should be as simple and brief as possible.

Measurement of Work executed after every agreed stage should be done and the quantities so obtained used alongside the rates in the schedule to arrive at interim valuation [for each stage]and the final valuation.

**BILLS OF QUANTITIES**

**DRILLING & EQUIPPING OF SHALLOW BOREHOLE PORTREITZ SPECIAL SCHOOL IN CHANGAMWE SUB-COUNTY, MOMBASA COUNTY CONTRACT NO. CWSB/GoK/W/MSA..../2018**

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs)	AMOUNT (KSHS)
<u>1</u>	<b>BILL NO. 1 PRELIMINARY &amp; GENERAL ITEMS</b>				
	<b>Contractual Requirements</b>				
1.1	Performance Security	Item	1		
1.2	Insurance for works	Item	1		
	<b>Performance Requirements</b>				
1.4	Provide, erect and maintain sign boards 1No. and Branding at locations shown by the Engineer.	Sum	1		
	<b>Administration Costs</b>				
1.5	Allow the Provisional Sum of Ksh. 150,000 to cover supervision costs of Engineers assigned on the project from the Employers head office to cover expenses for communications, transport, allowances, etc to be expended as directed by the Project Manager.	PS	1	150,000.00	150,000.00
1.6	Add ..... % for Contractors profit & overhead costs for item 1.6 above	%			
1.7	Allow Provisional sum of Kshs 50,000 for each borehole for acquisition of drilling and abstraction permits from Water Resources Management Authority. The Contractor will be required to make applications on behalf of the Board and ensure timely acquisition of the permits.	PS	1	50,000	50,000
1.8	Add ..... % for Contractors profit & overhead costs for item 1.7above	%			

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs)	AMOUNT (KSHS)
1.9	Allow provisional Sum for Ksh.70,000 for Hydrogeological Survey for appropriate 1No. drilling site selection (provisional)	Sum	1	70,000	70,000
	<b>TOTAL BILL NO. 1 PRELIMINARY &amp; GENERAL ITEMS carried to SUMMARY PAGE</b>				
	<b>BILL NO. 2 BOREHOLE DRILLING</b>				
<b>2.1</b>	<b>Mobilization</b>				
2.1.1	Mobilization of drilling unit to site, erect at position of borehole, dismantle and demobilize on completion	Sum	1		
2.1.2	Allow for all costs involved in providing water for all requirements	Sum	1		
2.1.3	Allow for clearance of site on completion	Sum	1		
<b>2.2</b>	<b>Drilling</b>				
	<b>Air drilling</b>				
2.2.1	Drilling a 254mm bore from 0 - 50 m	M	50		
2.2.2	Ditto above but from 100 - 200 m	M			
2.2.3	Allow for collection and sampling of drill cuttings at 2-meter intervals	Sum	1		
	<b>Mud drilling</b>				
2.2.5	Drilling a 200mm bore from 0 - 50m	M	50	Rates only	
2.2.6	Ditto above but from 100 - 200 m	M			
2.2.8	Allow for collection and sampling of drill cuttings at 2-meter intervals	Sum	1		
<b>2.3</b>	<b>Well Construction</b>				
2.3.1	Supply and install 160mm plain uPVC casing class E	M	50		
2.3.2	Supply and install 160mm uPVC screens class E	M	30		
2.3.3	Supply and install gravel pack with average grain size of 2 mm if applicable after proper grading.	Ton	4		
2.3.4	Grouting of top 3 meters of annular space between casing and borehole	Sum	2		

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs)	AMOUNT (KSHS)
2.3.5	Form concrete surface plug around casing with dimensions 1000 x 1000 x 1000 mm	Sum	2		
<b>2.4</b>	<b>Well Development and Testing</b>				
2.4.1	Well development using air or water jetting as recommended by the Engineer or his appointed representative	Hr	6		
2.4.2	Insertion and removal of equipment	Hr	6		
	<b>Test pumping</b>				
2.4.3	Undertake a discharge test as specified	Hr	12		
	<b>Recovery Test</b>				
2.4.4	Undertake a recovery test as specified or until the initial water rest level	Hr	8		
2.4.5	Supply and install 200 mm diameter well cap	Sum	1		
2.4.6	Carry out chemical analysis of water and submit report to the client	Sum	1		
	<b>TOTAL BILL NO. 2 BOREHOLE DRILLING carried to SUMMARY PAGE</b>				
<b>3</b>	<b>BILL NO. 3 BOREHOLE EQUIPPING</b>				
	<i>Allow for Supply and Installation of the following. The cost should include all the required fittings</i>				
3.1	<b>Submersible Pump</b>				
3.1.1	Allow for provision sum Ksh 550,000 for purchase of a submersible pump with metallic impellers complete with a three Phase Motor with capacity to pump approximately 5-15m <sup>3</sup> /hr against a pumping head of 65m. <i>Precise head and flow are to be established after test pumping the borehole above.</i>	Prov Sum	1	550,000.00	550,000
3.2	<b>Drawdown Pipes and Cables</b>				
	<i>Supply and install the following</i>				

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs)	AMOUNT (KSHS)
3.2.1	65mm diameter GI Pipes Include all the required joinery fittings.	m	50		
3.2.2	10mm <sup>2</sup> x 4core submersible drop cable	m	50		
3.2.3	Electrode cable (1mm <sup>2</sup> x 1core	m	50		
3.2.4	Electrodes	Nr	2		
3.2.5	Cable splicing Kit	Nr	1		
3.2.6	uPVC dipper pipes 20mm Diameter	m	50		
3.3	<b>Borehole Surface Sundries</b>				
3.3.1	Borehole cover plate 250mm complete with fittings	Nr	1		
3.3.2	GI Plug 65mm diameter	Nr	1		
3.3.3	GI bend 65mm diameter	Nr	2		
3.3.4	GI union 65mm diameter	Nr	1		
3.3.5	65x25mm diameter GI Tee	Nr	1		
3.3.6	Gate valve 65mm diameter Peglar type or equivalent	Nr	1		
3.3.7	GI reducer tee diameter 38mm	Nr	2		
3.3.8	Single orifice air valve 25mm complete with fittings	Nr	1		
3.3.9	Non-Return Valve 65mm Peglar flap type or equivalent	Nr	1		
3.3.10	Pressure gauge minimum 10 bars	Nr	1		
3.3.11	Water meter complete with accessories 65mm	Nr	1		
	<b>Control Panel</b>				
3.3.12	Allow for purchase of control panel complete with all protection functions (overload, phase loss, dry run, overload etc) to run the pump above to specifications and as directed by the Engineer. (Provisional)	prov sum	1		
3.3.17	Allow for cable work and other related sundries	Sum	1		
	Allow KPLC Connection as per Quotation	Sum	1		
3.4	<b>Disinfection and Testing of works</b>				
3.4.1	Allow for disinfection and testing of works	Sum	1		

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs)	AMOUNT (KSHS)
	<b>TOTAL BILL NO. 3 BOREHOLE EQUIPPING carried to SUMMARY PAGE</b>				
4	<b>BILL NO. 4 KPLC Power Connection</b>				
4.1	Allow KPLC Connection and Meter as per Quotation	Sum	1		
	<b>TOTAL BILL NO. 4 KPLC POWER CONNECTION carried to SUMMARY PAGE</b>				
5	<b>BILL NO. 5 ELEVATED PLASTIC STORAGE TANK</b>				
5.1	<b>Plastic Storage Tank on an Elevated Platform</b>				
5.1.1	Allow for supply, Delivery and installation of 10m <sup>3</sup> Plastic tank above	Nr	1		
5.1.2	Allow construction of steel girder 10m high water tower on rc foundation to act as water holding platform for 10m <sup>3</sup> Plastic tank above (to specifications).	Nr	1		
5.3	<b>Plumbing works</b>				
5.3.1	Supply all materials and connect to tank to be installed to the borehole with 65mm diameter uPVC/GI pipe for length not exceeding 80m and as per the Engineers instruction.	Sum	1		
5.3.2	Allow for fittings consisting of a gate Valve, Air valve Sockets, Wash out and a stand pipe all on a 65mm diameter pipe	Sum	1		
5.3.3	Allow for installation of a standpipe a Yard Tap Water Point to specifications.	nr	1		
	<b>TOTAL BILL NO. 5 ELEVATED PLASTIC STORAGE TANK carried to SUMMARY PAGE</b>				
6	<b>BILL NO. 6 FENCING WORKS</b>				
6.1	Specified concrete fence posts	Nr	110		
6.1.1	Bracing posts	Nr	16		
6.1.2	Chain link fencing	m	320		
6.1.3	Gate post	Nr	2		
6.1.4	4m wide double leaf gate	Nr	1		
6.1.5	Fixtures				
6.2	Double leaf metal door frame 1.2m wide by 2.2m high and low for 300m long R16 metal grills	Nr	1		
6.3	Approved lock, like yale or similar	Nr	1		

ITEM	DESCRIPTION	UNIT	QTY	RATE (Kshs)	AMOUNT (KSHS)
	<b>TOTAL BILL NO.6 FENCING WORKS carried to SUMMARY PAGE</b>				

	<b>SUMMARY SHEET</b>	<b>AMOUNT (KSH)</b>
1	<b>BILL NO. 1 PRELIMINARY &amp; GENERAL ITEMS</b>	
2	<b>BILL NO. 2 BOREHOLE DRILLING</b>	
3	<b>BILL NO. 3 BOREHOLE EQUIPPING</b>	
4	<b>BILL NO. 4 BILL NO. 4 KPLC POWER CONNECTION</b>	
5	<b>BILL NO. 5 ELEVATED PLASTIC STORAGE TANK</b>	
6	<b>BILL NO. 6 FENCING WORKS</b>	
	<b>TOTAL</b>	
	<b>Add 5 % Contingency</b>	

<b>Add 16%VAT</b>	
<b>GRAND TOTAL</b>	



**SECTION V**  
**STANDARD FORMS**

**List of Standard Forms**

- (i) Form of Invitation for Tenders**
- (ii) Form of Tender**
- (iii) Letter of Acceptance**
- (iv) Form of Agreement**
- (v) Form of Tender Security**
- (vi) Performance Bank Guarantee**
- (vii) Performance Bond**
- (viii) Bank Guarantee for Advance Payment**
- (ix) Qualification Information**
- (x) Tender Questionnaire**
- (xi) Confidential Business Questionnaire**
- (xii) Details of Sub-Contractors**
- (xiii) Request for Review Form**

## FORM OF INVITATION FOR TENDERS

\_\_\_\_\_ [date]

To: \_\_\_\_\_ [name of Contractor]  
\_\_\_\_\_ [address]  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sirs:

Reference: \_\_\_\_\_ [Contract Name]

You have been prequalified to tender for the above project.

We hereby invite you and other prequalified tenderers to submit a tender for the execution and completion of the above Contract.

A complete set of tender documents may be purchased by you from \_\_\_\_\_  
\_\_\_\_\_ [mailing address, cable/telex/facsimile numbers].

Upon payment of a non-refundable fee of Kshs \_\_\_\_\_

All tenders must be accompanied by \_\_\_\_\_ number of copies of the same and a tender security in the form and amount specified in the tendering documents, and must be delivered to

\_\_\_\_\_ [address and location]

at or before \_\_\_\_\_ (time and date). Tenders will be opened immediately thereafter, in the presence of tenderers' representatives who choose to attend.

Please confirm receipt of this letter immediately in writing by cable/facsimile or telex.

Yours faithfully,

\_\_\_\_\_ Authorized Signature

---

Name and Title

# FORM OF TENDER

TO: \_\_\_\_\_[Name of Employer] \_\_\_\_\_[Date]  
\_\_\_\_\_ [Name of Contract]

Dear Sir,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities/Schedule of Rates for the execution of the above named Works, we, the undersigned offer to construct, install and complete such Works and remedy any defects therein for the sum of Kshs. \_\_\_\_\_ [Amount in figures] Kenya Shillings \_\_\_\_\_ [Amount in words]
2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Employer's Representative's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Appendix to Conditions of Contract.
3. We agree to abide by this tender until \_\_\_\_\_ [Insert date], and it shall remain binding upon us and may be accepted at any time before that date.
4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_

duly authorized to sign tenders for and on behalf of  
\_\_\_\_\_ [Name of Tenderer] of  
\_\_\_\_\_ [Address of Tenderer]

Witness; Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

(Amend accordingly if provided by Insurance Company)

**LETTER OF ACCEPTANCE**  
**[letterhead paper of the Employer]**

\_\_\_\_\_ [date]

To: \_\_\_\_\_  
[name of the Contractor]

\_\_\_\_\_  
[address of the Contractor]

Dear Sir,

This is to notify you that your Tender dated \_\_\_\_\_  
for the execution of \_\_\_\_\_  
*[name of the Contract and identification number, as given in the Tender documents]*  
for the Contract Price of Kshs. \_\_\_\_\_ *[amount in*  
*figures]* Kenya Shillings \_\_\_\_\_ *(amount in words)* ] in  
accordance with the Instructions to Tenderers is hereby accepted.

You are hereby instructed to proceed with the execution of the said Works in  
accordance with the Contract documents.

Authorized Signature .....

Name and Title of Signatory .....

Attachment : Agreement

## FORM OF AGREEMENT

THIS AGREEMENT, made the \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_  
between \_\_\_\_\_ of [or whose registered  
office is situated at] \_\_\_\_\_  
(hereinafter called “the Employer”) of the one part AND  
\_\_\_\_\_ of [or whose registered  
office is situated at] \_\_\_\_\_  
(hereinafter called “the Contractor”) of the other part.

WHEREAS THE Employer is desirous that the Contractor executes

\_\_\_\_\_ *(name and identification number of Contract )* (hereinafter called “the Works”) located at \_\_\_\_\_ *[Place/location of the Works]* and the Employer has accepted the tender submitted by the Contractor for the execution and completion of such Works and the remedying of any defects therein for the Contract Price of Kshs \_\_\_\_\_ *[Amount in figures]*, Kenya Shillings \_\_\_\_\_ *[Amount in words]*.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and shall be read and construed as part of this Agreement i.e.
  - (i) Letter of Acceptance
  - (ii) Form of Tender
  - (iii) Conditions of Contract
  - (iv) Appendix to Conditions of Contract
  - (v) Specifications
  - (vi) Drawings
  - (vii) Priced Bills of Quantities/Priced Schedule of Rates [whichever is applicable]
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any 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.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The common Seal of \_\_\_\_\_

Was hereunto affixed in the presence of \_\_\_\_\_

Signed Sealed, and Delivered by the said \_\_\_\_\_

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

In the presence of (i) Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

[ii] Name \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

## FORM OF TENDER SECURITY

WHEREAS .....(hereinafter called “the Tenderer”) has submitted his tender dated ..... for the construction of .....  
..... (name of Contract)

KNOW ALL PEOPLE by these presents that WE ..... having our registered office at .....(hereinafter called “the Bank”), are bound unto .....(hereinafter called “the Employer”) in the sum of Kshs..... for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents sealed with the Common Seal of the said Bank this ..... Day of .....20.....

THE CONDITIONS of this obligation are:

If after tender opening the tenderer withdraws his tender during the period of tender validity specified in the instructions to tenderers

Or

If the tenderer, having been notified of the acceptance of his tender by the Employer during the period of tender validity:

- (a) fails or refuses to execute the form of Agreement in accordance with the Instructions to Tenderers, if required; or
- (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Tenderers;

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

This guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the said date.

\_\_\_\_\_  
[date]

\_\_\_\_\_  
[signature of the Bank]

\_\_\_\_\_  
[witness]

\_\_\_\_\_  
[seal]



## **PERFORMANCE BANK GUARANTEE**

To: \_\_\_\_\_ (Name of Employer) \_\_\_\_\_ (Date)  
\_\_\_\_\_ (Address of Employer)

Dear Sir,

WHEREAS \_\_\_\_\_ (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_ (hereinafter called "the Works");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Kshs. \_\_\_\_\_ (*amount of Guarantee in figures*) Kenya Shillings \_\_\_\_\_ (*amount of Guarantee in words*), and we undertake to pay you, upon your first written demand and without civil or argument, any sum or sums within the limits of Kenya Shillings \_\_\_\_\_ (*amount of Guarantee in words*) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change, addition or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any change, addition, or modification.

This guarantee shall be valid until the date of issue of the Certificate of Completion.

SIGNATURE AND SEAL OF THE GUARANTOR \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

*(Amend accordingly if provided by Insurance Company)*

## **PERFORMANCE BOND**

By this Bond, We \_\_\_\_\_ of (or whose registered office is situated at] \_\_\_\_\_ as Principal (hereinafter called “the Contractor”) and \_\_\_\_\_ of[or whose registered office is situated at] \_\_\_\_\_ as Surety (hereinafter called “the Surety”), are held and firmly bound unto \_\_\_\_\_ of[or whose registered office is situated at] \_\_\_\_\_ as Obligee (hereinafter called “the Employer”) in the amount of Kshs. \_\_\_\_\_ *[amount of Bond in figures]* Kenya Shillings

\_\_\_\_\_ *[amount of Bond in words]*, for the payment of which sum well and truly, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Contractor has entered into a Contract with the Employer dated the \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_ for the execution of

\_\_\_\_\_ *[name of Contract]* in accordance with the Contract documents, 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 tender or tenders from qualified tenderers 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 tenderer, arrange for a Contract between such tenderer 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 the Employer to the Contractor under the

Contract, less the amount properly paid by the Employer to the Contractor;  
or

- (3) pay the Employer the amount required by the 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 issuance of the Certificate of Completion.

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\_\_\_\_\_

SIGNED ON \_\_\_\_\_ SIGNED ON \_\_\_\_\_

On behalf of \_\_\_\_\_ On behalf of \_\_\_\_\_  
*[name of Contractor]* *[name of Surety]*

By \_\_\_\_\_ By \_\_\_\_\_

In the capacity of \_\_\_\_\_ In the capacity of \_\_\_\_\_

In the presence of;Name \_\_\_\_\_ In the presence of;Name \_\_\_\_\_

Address \_\_\_\_\_

Address \_\_\_\_\_

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

## **BANK GUARANTEE FOR ADVANCE PAYMENT**

To: \_\_\_\_\_ *[name of Employer]* \_\_\_\_\_ *(Date)*  
\_\_\_\_\_ *[address of Employer]*

Gentlemen,

Ref: \_\_\_\_\_ *[name of Contract]*

In accordance with the provisions of the Conditions of Contract of the above-mentioned Contract, We, \_\_\_\_\_ *[name and Address of Contractor]* (hereinafter called "the Contractor") shall deposit with \_\_\_\_\_ *[name of Employer]* a bank guarantee to guarantee his proper and faithful performance under the said Contract in an amount of Kshs. \_\_\_\_\_ *[amount of Guarantee in figures]* Kenya Shillings \_\_\_\_\_ *[amount of Guarantee in words]*.

We, \_\_\_\_\_ *[bank or financial institution]*, as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to \_\_\_\_\_ *[name of Employer]* on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding Kshs \_\_\_\_\_ *[amount of Guarantee in figures]* Kenya Shillings \_\_\_\_\_ *[amount of Guarantee in words]*, such amount to be reduced periodically by the amounts recovered by you from the proceeds of the Contract.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between \_\_\_\_\_ *[name of Employer]* and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

No drawing may be made by you under this guarantee until we have received notice in writing from you that an advance payment of the amount listed above has been paid to the Contractor pursuant to the Contract.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until \_\_\_\_\_ (*name of Employer*) receives full payment of the same amount from the Contract.

Yours faithfully,

Signature and Seal \_\_\_\_\_

Name of the Bank or financial institution \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

Witness: Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# QUALIFICATION INFORMATION

## 1. Individual Tenderers or Individual Members of Joint Ventures

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

Place of registration: \_\_\_\_\_

Principal place of business \_\_\_\_\_

Power of attorney of signatory of tender **shall be required**

### 1.2 Total annual volume of construction work performed in the last **Three (3) years shall be kshs.20 Million**

Year	Volume	
	Currency	Value
Yr 1		
Yr 2		
Yr 3		

### 1.3 Work performed as Main Contractor on works of a similar nature within the last Three (3) years with a *minimum value* of Ksh.10 Million. Also list details of work under way or committed, including expected completion date.

Year	Project name	Name of Client	Description of Similar work performed	Value of Contract (Ksh)
Yr 1				
Yr 2				
Yr 3				

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

### 1.5. Equipment

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

<b>No.</b>	<b>Equipment Type and Characteristics</b>	<b>Minimum Number required</b>
1	7/10 ton Tipper Lorry	1
2	Dozer	1
3	Excavator	1
4	4WD Pickup	1
5	Rock breakers	
6	Back hoe excavator	1
7	Water Bowser	1
8	Hand tools equipment (Assorted)	Various

## 1.6. Personnel

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

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

<b>No.</b>	<b>Position</b>	<b>Total Work Similar Experience (years)</b>	<b>In Similar Works Experience (years)</b>
1	Civil Engineer	5	3
2	Hydro-geologist	5	3
3	Construction Technicians (Pipefitters)	7	5
4	Plant Operators	8	6
5	Surveyor	5	3

## 1.7. Financials

Financial reports for the last three (3) years: balance sheets, profit and loss statements, auditor's reports, etc. List below and attach copies.

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

## **2 Joint Ventures**

- 2.0 The information listed in 1.1 – 2.0 above shall be provided for each partner of the joint venture.
- 2.1 The information required in 1.11 above shall be provided for the joint venture.
- 2.2 Attach the power of attorney of the signatory(ies) of the tender authorizing signature of the tender on behalf of the joint venture
- 2.3 Attach the Agreement among all partners of the joint venture ( and which is legally binding on all partners), which shows that:
  - a) all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
  - b) one of the partners will be nominated as being in charge, authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture; and
  - c) the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.



## **TENDER QUESTIONNAIRE**

Please fill in block letters.

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

\_\_\_\_\_  
Signature of Tenderer

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

**ANTI-CORRUPTION DECLARATION COMITMENT/ PLEDGE**

**(Sections 39, 40, 41, 42, 43 & of the PPD Act, 2005)**

I/We/Messrs.....

of Street, Building, P O Box.....

.....

Contact/Phone/E mail.....

declare that Public Procurement is based on a free and fair competitive Tendering process which should not be open to abuse.

I/We .....

declare that I/We will not offer or facilitate, directly or indirectly, any inducement or reward to any public officer, their relations or business associates, in connection with

Tender/Tender No .....

for or in the subsequent performance of the contract if I/We am/are successful.

Authorized  
Signature.....

Name and Title of Signatory.....



# **CONFIDENTIAL BUSINESS QUESTIONNAIRE**

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

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

## *Part 1 – General*

Business Name .....

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

Plot No..... Street/Road .....

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

Nature of Business.....

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

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

Name of your bankers.....

Branch.....

## *Part 2 (a) – Sole Proprietor*

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

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

Citizenship details .....

## *Part 2 (b) – Partnership*

*Give details of partners as follows:*

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

## **DETAILS OF SUB-CONTRACTORS**

If the Tenderer wishes to sublet any portions of the Works under any heading, he must give below details of the sub-contractors he intends to employ for each portion.

Failure to comply with this requirement may invalidate the tender.

(1) Portion of Works to be sublet: .....

[i] Full name of Sub-contractor  
and address of head office: .....

.....

(ii) Sub-contractor's experience  
of similar works carried out  
in the last 3 years with  
Contract value: .....

.....

.....

(2) Portion of Works to sublet: .....

(i) Full name of sub-contractor  
and address of head office: .....

.....

.....

(ii) Sub-contractor's experience  
of similar works carried out  
in the last 3 years with  
contract value: .....

.....

\_\_\_\_\_  
[Signature of Tenderer)

\_\_\_\_\_  
Date

# **Tender-Securing Declaration (Mandatory)**

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

Tender No.: *[insert **number of Tendering process**]*

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

To: *[insert **complete name of Procuring Entity**]*

We, the undersigned, declare that:

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

We accept that we will automatically be suspended from being eligible for Tendering in any contract with the Procuring Entity for the period of time of *[insert **number of months or years**]* starting on *[insert **date**]*, if we are in breach of our obligation(s) under the Tender conditions, because we;

- a) Have withdrawn our Tender during the period of Tender validity specified in the Form of Tender; or
- b) Having been notified of the acceptance of our Tender by the Procuring Entity during the period of Tender validity,
  - (i). Fail or refuse to execute the Contract, if required, or
  - (ii). Fail or refuse to furnish the Performance Security, in accordance with the ITT.

We understand this Tender Securing Declaration shall expire if we are not the successful Tenderer, upon the earlier of;

- 1) Our receipt of your notification to us of the name of the successful Tenderer; or
- 2) Thirty days after the expiration of our Tender.

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

Name: *[insert **complete name of person signing the Tender Securing Declaration**]*

Duly authorized to sign the Tender for and on behalf of: *[insert **complete name of Tenderer**]*

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ *[insert date of signing]*

Corporate Seal (where appropriate)

**LETTER OF NOTIFICATION OF AWARD**

Address of Procuring Entity

\_\_\_\_\_  
\_\_\_\_\_

To: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RE: Tender No. \_\_\_\_\_

Tender Name \_\_\_\_\_

This is to notify that the contract/s stated below under the above mentioned tender have been awarded to you.

\_\_\_\_\_  
\_\_\_\_\_

1. Please acknowledge receipt of this letter of notification signifying your acceptance.
2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

*(FULL PARTICULARS)* \_\_\_\_\_  
\_\_\_\_\_

SIGNED FOR ACCOUNTING OFFICER

**REPUBLIC OF KENYA**  
**PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD**

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

BETWEEN

.....APPLICANT

AND

.....RESPONDENT (*Procuring Entity*)

Request for review of the decision of the..... (*Name of the Procuring Entity*) of .....dated the...day of .....20.....in the matter of Tender No.....of .....20...

**REQUEST FOR REVIEW**

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

- 1.
  - 2.
- etc.

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

- 1.
  - 2.
- etc

SIGNED .....(Applicant)

Dated on.....day of ...../...20...

---

**FOR OFFICIAL USE ONLY**

Lodged with the Secretary Public Procurement Administrative Review Board on ..... day of .....20.....

SIGNED  
Board Secretary



## **ANNEX 1 – EVALUATION CRITERIA**

### PRELIMINARY EXAMINATION OF COMPLETENESS OF BID DOCUMENTS

#### **A. MANDATORY REQUIREMENTS**

- (a) copies of certificates of registration, and principal place of business;
- (b) Ensure your firm is e- citizen linked
- (c) Valid Tax Compliance Certificate
- (d) Copies of PIN Certificate
- (e) Copies of VAT Certificate
- (f) Valid Copies of CR 12
- (g) Copies valid AGPO Certificate
- (h) Dully completed , Signed & Stamped Tender Securing declaration
- (i) Dully filled, signed and stamped price schedules & Bill of quantities.
- (j) Bid Validity shall be 90 days
- (k) Power of attorney shall be required
- (l) Dully completed , Signed & Stamped Form of Tender
- (m) Dully completed , Signed & Stamped Business questionnaire
- (n) Copies of certificate of registration NCA 8 and above on water works
- (o) Document must be paginated
- (p) total monetary value of construction work performed for each of the last Three (3) years;
- (q) experience in works of a similar nature and size for each of the last Three (3) years, and clients who may be contacted for further information on these contracts;
- (r) major items of construction equipment owned or leased
- (s) qualifications and experience of key site management and technical personnel proposed for the Contract;
- (t) reports on the financial standing of the Tenderer, such as profit and loss statements and auditor's reports for the last two years;
- (u) Authority to seek references from the Tenderer's bankers.
- (v) Submit Anti-Corruption Declaration Commitment/ Pledge

#### **B. QUALIFICATION CRITERIA**

- a) Access to Liquid assets
- b) Minimum average annual construction turnover
- c) General construction experience
- d) Minimum contracts of similar experience
- e) Adequacy of technical proposal
- f) Key Personnel
- g) Equipment



