

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT



MPWAPWA DISTRICT COUNCIL
P.O.BOX 12
MPWAPWA



CONTRACT DOCUMENT
FOR
CONSTRUCTION OF INTENSIVE CARE UNIT (ICU) AT MPWAPWA DISTRICT
HOSPITAL

CONTRACT NO. LGA/023/2021-22/HQ/W/116
BETWEEN

MPWAPWA DISTRICT COUNCIL
AND
AZHAR CONSTRUCTION COMPANY LIMITED
P.O. BOX 35918
DAR ES SALAAM.

PREPARED BY
THE DISTRICT EXECUTIVE DIRECTOR'S OFFICE
MPWAPWA DISTRICT COUNCIL
P.O.BOX 12
MPWAPWA

FEBRUARY, 2022

FORM OF AGREEMENT

This agreement is made on.....17.....day of.....02.....in the year 2022

BETWEEN

MPWAPWA DISTRICT COUNCIL OF P.O.BOX 12, MPWAPWA, hereinafter called the Employer

AND

M/S AZHAR CONSTRUCTION COMPANY LIMITED, P.O. BOX 35918, DAR ES SALAAM, hereinafter called the "contractor" of the other part

WHEREAS the Employer desirous these works for : **CONSTRUCTION OF INTENSIVE CARE UNIT (ICU) AT MPWAPWA DISTRICT HOSPITAL LGA/023/2021-22/HQ/W/116** should be executed by the Contractor

AND WHEREAS the Contractor has accepted a tender for the execution and completion of such works and remedy of any defect therein.

Now it is hereby agreed as follows

1. That, the following documents shall be deemed to form and read and construed as part of this Contract.
 1. Form of agreement
 2. Letter of Acceptance,
 3. Bid Submission Form
 4. General Condition of Contract
 5. Specification
 6. Price Bill of Quantities
2. In consideration of payment to be made by the "Employer" to the Contractor as hereinafter mentioned, the Contractor hereby covenants with "Employer"
 - To execute and complete the Works in conformity in all respects with the provisions of the Contract.

The "Employer" hereby covenants

To pay the "Contractor" in execution, completion of the Work and the remedying of defects wherein at the Sum of **Tsh 248,191,642.00** (Two Hundred Forty Eighty Million One hundred ninety one thousand Six Hundred Forty two, Tanzania Shillings.

Contract Duration is 120 days. The Works shall Commence on this.....¹⁷.....day of.....⁰².....2021 completed on or before this¹⁶.....day of.....⁰⁶.....in the year 2021. (Hereinafter referred to as the date of Completion) or such others date as may be extended under the provisions of the Contract.

The designated Supervising Officer under the Contract shall be the DISTRICT ENGINEER (DE), Mpwapwa District Council.

In witness whereof the parties have caused this Agreement to be executed the day and year first before written.

FOR AND BEHALF OF THE EMPLOYER

District Executive Director

Name: Mufanhamisi H. Ahly

Position: DED

Signature: [Signature]

Date: 17/02/2022

In the Presence of

Name: George O. Fume

Position: M/Ku

Signature: [Signature]

Date: 17/02/2022

MKURUGENZI MTENDAJI
HALMASHAURI YA WILAYA
MPWAPWA

For and on behalf of the Contractor.

Name: SALEH SALEH RWEGERA

Position: Company Secretary

Signature: [Signature]

Date: 17/02/2022

In the Presence of

Name: Muhammed Sir

Position: Muhammed Sir

Signature: [Signature]

Date: 01/02/17/02/2022



JAMHURI YA MUUNGANO WA TANZANIA
OFISI YA RAIS
TAWALA ZA MIKOA NA SERIKALI ZA MITAA
HALMASHAURI YA WILAYA YA MPWAPWA



Fax DISCO MPWAPWA

Fax Na: 255- 026 -2320122/2020152
Email:ded@mpwapwapwadc.go.tz
Website:www.mpwapwa.go.tz

S. L. P. 12
MPWAPWA
16/02/2022

In reply Please quote:
Ref.No. HW/MPW/B10/174/83

Azhar Construction Company Limited
P.O. Box 35918
Dar Es Salaam.

REF: No. CONSTRUCTION OF INTENSIVE CARE UNIT (ICU) AT MPWAPWA
DISTRICT HOSPITAL LGA/023/2021-22/HQ/W/116

SUB: Letter of award.

The above Mentioned subject refers.


Be informed that Tender No. LGA/023/2021-22/HQ/W/116 on the mentioned above subject has been accepted as per your quoted price of Tsh. 248,191,642.00 (Two Hundred Forty Eighty Million One hundred ninety one thousand Six Hundred Forty two, Tanzania Shillings)

This acceptance was adjudicated by Mpwapwa District Council Tender Board Meeting held on 02nd February, 2022. The work should be completed within 120 days from the commencement date.

You are therefore required to contact the District Executive Director with your witness (es) in order to sign the Contract.

NOTE: You are required to submit Performance security as indicated in SCC clause 26, GCC clause 55.1, before starting implementation of the works.

Sincerely,


Mwanahamisi H. Ally
DISTRICT EXECUTIVE DIRECTOR
MPWAPWA DISTRICT COUNCIL
MPWAPWA

SECTION IV: GENERAL CONDITIONS OF CONTRACT

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A. General

1. Definitions 1.1 Boldface type is used to identify defined terms.

The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 24 and 25 hereunder.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Tender.

Compensation Events are those defined in Clause 47 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with Sub-Clause 55.1.

The **Contract** is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contractor** is a 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 and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; months are calendar months.

Dayworks are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.

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

The **Defects Liability Certificate** is the certificate issued by Project Manager upon correction of defects by the Contractor.

The **Defects Liability Period** is the period named in the **Special Conditions of Contract** and calculated from the Completion Date.

Drawings include calculations and other information provided or approved by the Project Manager for the execution of the Contract.

The **Employer** 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 to construct the Works.

Force Majeure means an event beyond the control of the Contractor and not involving the Contractor's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Employer in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the **Special Conditions of Contract**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.

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

Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

The **Project Manager** is the person named in the **Special Conditions of Contract** (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.

The **Site** is the area defined as such in the **Special Conditions of Contract**.

Site Investigation Reports are those that were included in the tendering documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.

The **Start Date** is given in the **Special Conditions of Contract**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

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

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

A **Variation** is an instruction given by the Project Manager that varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the **Special Conditions of Contract**.

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| 2. Interpretation | <p>2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager will provide instructions clarifying queries about these Conditions of Contract.</p> <p>2.2 If sectional completion is specified in the Special Conditions of Contract, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).</p> <p>2.3 The documents forming the Contract shall be interpreted in the following order of priority:</p> <ul style="list-style-type: none">(1) Agreement,(2) Letter of Acceptance,(3) Contractor's Tender,(4) Special Conditions of Contract,(5) Conditions of Contract,(6) Specifications,(7) Drawings,(8) Bill of Quantities, and(9) Any other document listed in the Special Conditions of Contract as forming part of the Contract. |
| 3. Language and Law | <p>3.1 The language of the Contract and the law governing the Contract are stated in the Special Conditions of Contract.</p> |
| 4. Confidentiality | <p>4.1 The Service Providers, their Subcontractors, and the Personnel of either of them shall not disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Employer's business or operations without the prior written consent of the Employer.</p> |
| 5. Project Manager's Decisions | <p>5.1 Except where otherwise specifically stated, the Project Manager will decide contractual matters between the Employer and the Contractor in the role representing the Employer.</p> |
| 6. Delegation | <p>6.1 The Project Manager may delegate any of his duties and</p> |

responsibilities to other people except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

- 7. Communications** 7.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
- 8. Subcontracting** 8.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations.
- 9. Other Contractors** 9.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors, as referred to in the **Special Conditions of Contract**. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification
- 10. Personnel** 10.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel, as referred to in the **Special Conditions of Contract**, to carry out the functions stated in the Schedule or other personnel approved by the Project Manager. The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel listed in the Schedule.
- 10.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
- 11. Employer's and Contractor's Risks** 11.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
- 12. Employer's Risks** 12.1 From the Start Date until the Defects Correction Certificate has been issued, the following are Employer's risks:
- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
 - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
 - (ii) negligence, breach of statutory duty, or interference with any legal right by the Employer or by any person

employed by or contracted to him except the Contractor.

- (a) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the Employer or in the Employer's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

12.2 From the Completion Date until the Defects Correction Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an Employer's risk except loss or damage due to

- (a) a Defect which existed on the Completion Date,
- (b) an event occurring before the Completion Date, which was not itself an Employer's risk, or
- (c) the activities of the Contractor on the Site after the Completion Date.

13. Contractor's Risks

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

14. Insurance

14.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the **Special Conditions of Contract** for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant, and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- (d) personal injury or death.

14.2 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

14.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a

debt due.

- 14.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.
- 14.5 Both parties shall comply with any conditions of the insurance policies.
15. **Site Investigation Reports**
- 15.1 The Contractor, in preparing the Tender, shall rely on any Site Investigation Reports referred to in the **Special Conditions of Contract**, supplemented by any information available to the Tenderer.
16. **Queries about the Special Conditions of Contract**
- 16.1 The Project Manager will clarify queries on the **Special Conditions of Contract**.
17. **Contractor to Construct the Works**
- 17.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
18. **Commencement and Completion**
- 18.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Programme submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
19. **Approval by the Project Manager**
- 19.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, who is to approve them if they comply with the Specifications and Drawings.
- 19.2 The Contractor shall be responsible for design of Temporary Works.
- 19.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 19.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 19.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
20. **Protection of the Environment**
- 20.1 The Contractors shall take all reasonable steps to protect the environment and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.
- 20.2 The Contractors shall ensure that emissions, surface discharges and effluent from his activities shall not exceed prescribed values in the

environmental laws.

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| 21. Labour Laws | <p>21.2 The Contractor shall comply with all the relevant labour laws applicable in the Country, including laws relating to workers employment, working hours, health, safety, welfare, immigration and shall allow them all their legal rights.</p> <p>21.2 The Contractor shall require his employees to obey all applicable laws, including those concerning safety at work.</p> |
| 22. Health and Safety | <p>22.1 The Contractor shall at all times take all reasonable precautions to maintain the health and safety of his personnel.</p> <p>22.2 The Contractor shall ensure that first aid facilities are available at all times at the site and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.</p> <p>22.3 The Contractor shall notify the Employer details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety, and welfare of persons, and damage to the property, as the Employer may reasonably require.</p> <p>22.4 The Contractor shall conduct an HIV-Aids awareness programme, and shall take other such measures as specified in the Special Conditions of Contractor to reduce the risk of transfer of HIV virus between and among Contractor personnel, the Employers Staff and the surrounding community.</p> |
| 23. Discoveries | <p>23.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.</p> |
| 24. Possession of the Site | <p>24.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Special Conditions of Contract, the Employer will be deemed to have delayed the start of the relevant activities, and this will be a Compensation Event.</p> |
| 25. Access to the Site | <p>25.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.</p> |
| 26. Instructions, Inspections and Audits | <p>26.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is</p> |

located.

- 26.2 The Contractor shall permit the Government of the United Republic of Tanzania to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Government of the United Republic of Tanzania, if so required by the Government of the United Republic of Tanzania

27. Disputes

- 27.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.

28. Procedure for Disputes

- 28.1 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 28.2 The Adjudicator shall be paid by the hour at the rate specified in the **Tender Data Sheet and Special Conditions of Contract**, together with reimbursable expenses of the types specified in the **Special Conditions of Contract**, and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.
- 28.3 The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and in the place shown in the **Special Conditions of Contract**.¹

29. Replacement of Adjudicator

- 29.1 Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the **Special Conditions of Contract** at the request of either party, within 14 days of receipt of such request.

B. Time Control

- 30. Programme**
- 30.1 Within the time stated in the **Special Conditions of Contract**, the Contractor shall submit to the Project Manager for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works.
- 30.2 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 30.3 The Contractor shall submit to the Project Manager for approval an updated Programme at intervals no longer than the period stated in the **Special Conditions of Contract**. If the Contractor does not submit an updated Programme within this period, the Project Manager may withhold the amount stated in the **Special Conditions of Contract** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 30.4 The Project Manager's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Project Manager again at any time. A revised Programme shall show the effect of Variations and Compensation Events
- 31. Extension of the Intended Completion Date**
- 31.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 31.2 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

- 32. Acceleration**
- 32.1 When the Employer wants the Contractor to finish before the Intended Completion Date, the Project Manager will obtain priced proposals for achieving the necessary acceleration from the Contractor. If the Employer accepts these proposals, the Intended Completion Date will be adjusted accordingly and confirmed by both the Employer and the Contractor.
- 32.2 If the Contractor's priced proposals for acceleration are accepted by the Employer, they shall be incorporated in the Contract Price and treated as a Variation.

- 33. Delays Ordered by the Project Manager**
- 33.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

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

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

C. Quality Control

- 36. Identifying Defects**
- 36.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover

and test any work that the Project Manager considers may have a Defect.

37. Tests

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

38. Correction of Defects

38.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the **Special Conditions of Contract**. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

38.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

38.3 If the Contractor has not corrected a defect within the time specified in the Employer's notice, a penalty for lack of performance will be paid by the Contractor. The amount to be paid will be calculated as a percentage of the cost of having the defect correct, assessed as described in Clause 49.

39. Uncorrected Defects

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

D. Cost Control

40. Bill of Quantities

40.1 The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

40.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor shall be paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

41. Changes in the Quantities

41.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.

41.2 The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the Employer.

41.3 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the

Bill of Quantities.

- 42. Variations** 42.1 All Variations shall be included in updated Programmes produced by the Contractor.
- 43. Payments for Variations** 43.1 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
- 43.2 If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work is above the limit stated in Sub-Clause 41.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.
- 43.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 43.4 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 43.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.
- 44. Cash Flow Forecasts** 44.1 When the Programme is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.
- 45. Payment Certificates** 45.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 45.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor within twenty eight 28 days of receipt of the certificate from the contractor.
- 45.3 The value of work executed shall be determined by the Project Manager.
- 45.4 The value of work executed shall comprise the value of the

quantities of the items in the Bill of Quantities completed.

45.5 The value of work executed shall include the valuation of Variations and Compensation Events.

45.6 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

45.7 The Project Manager shall not bound to certify any payment, if the net amount, after all retentions and deductions would be less than minimum amount of Interim Payment Certificate stated in the **Special Condition of Contract**.

46. Payments

46.1 Payments shall be adjusted for deductions for advance payments and retention. The Employer shall pay the Contractor the amounts certified by the Project Manager within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made as indicated in the **Special Conditions of Contract**.

46.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

46.3 Unless otherwise stated, all payments and deductions will be paid or charged in the proportions of currencies comprising the Contract Price.

46.4 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

47. Compensation Events

47.1 The following shall be Compensation Events:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date as per Clause 24.1.
- (b) The Employer modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to

carry out additional tests upon work, which is then found to have no Defects.

- (e) The Project Manager unreasonably does not approve a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to tenderers (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities, or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed.
- (j) The effects on the Contractor of any of the Employer's Risks.
- (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- (l) Other Compensation Events described in the Contract or determined by the Project Manager shall apply.

47.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

47.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager will assume that the Contractor will react competently and promptly to the event.

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

48. Taxes

48.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of tenders for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of Clause 50.

49. Currencies

49.1 Where payments are made in currencies other than the Tanzania Shillings, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Tender.

50. Price Adjustment

50.1 The amounts payable to the Contractor, in various currencies pursuant to Sub-Clause 45.1, shall be adjusted in respect of the rise or fall in the cost of labor, Contractor's Equipment, Plant, materials, and other inputs to the Works, by applying to such amounts the formulae prescribed in this clause.

50.2 To the extent that full compensation for any rise or fall in costs to the Contractor is not covered by the provisions of this or other clauses in the Contract, the accepted contract amount shall be deemed to include amounts to cover the contingency of such other rise or fall of costs.

50.3 The adjustment to be applied to the amount otherwise amount payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable. No adjustment is to be applied to work valued on the basis of Cost or current prices. The formulae shall be as follows;

$$P_n = a + b \frac{L_n}{L_o} + c \frac{M_n}{M_o} + d \frac{E_n}{E_o} + \text{etc.}$$

where;

P_n is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in the subject month, where such variations and daywork are not otherwise subject to adjustment;

a is a constant, specified in the **Appendix to Tender**, representing the nonadjustable portion in contractual payments;

b, c, d, etc., are weightings or coefficients representing the estimated proportion of each cost element (labor, materials, equipment usage, etc.) in the Works or sections thereof, net of Provisional Sums, as specified in the **Appendix to Tender**; the sum of **a, b, c, d, etc.**, shall be one;

L_n, M_n, E_n , etc., are the current cost indices or reference prices of the cost elements in the specific currency of origin for month "n," determined pursuant to Sub-Clause 50.5, applicable to each cost element; and

L_o, M_o, E_o , etc., are the base cost indices or reference prices corresponding to the above cost elements at the date specified in Sub-Clause 50.5

The value of net work done, certified by the Project Manager, in any monthly Interim or Final Certificate as payable by the Employer to the Contractor before deduction of any retention money shall be increased or decreased by an amount of 'F'.

$$F = P_n x P_c$$

where;

The effective value P_c of work done which is to be subjected to increase or decrease shall be the difference between:

- (i) the amount which, in the opinion of the Project Manager, is due to the Contractor under Clause 45 (before deduction of retention money and before deducting sums previously paid on account) less:
 - any amount for payment or repayment of any advance payment;
 - any amount for materials on site (if any);
 - any amounts for nominated sub-contractors (if any)
 - any amounts for any other items based on actual cost or current prices; or
 - any sums for increase or decreases in the Contract Price paid under this Sub-Clause
- and
- (ii) the amount calculated in accordance with (i) above of this Sub-clause and included in the last preceding statement.

50.4 The sources of indices shall be those listed in the **Appendix to Tender**, as approved by the Engineer. Indices shall be appropriate for their purpose and shall relate to the Contractor's proposed source of supply of inputs on the basis of which his Contract Price and expected foreign currency requirements shall have been computed. As the proposed basis for price adjustment, the Contractor shall have submitted with his tender the tabulation of Weightings and Source of Indices in the **Appendix to Tender**, which shall be subject to approval by the Engineer.

50.5 The base cost indices or prices shall be those prevailing on the day 28 days prior to the latest date for submission of tenders. Current indices or prices shall be those prevailing on the day 28 days prior to the last day of the period to which a particular Interim Payment

Certificate is related. If at any time the current indices are not available, provisional indices as determined by the Engineer will be used, subject to subsequent correction of the amounts paid to the Contractor when the current indices become available.

50.6 If the Contractor fails to complete the Works within the time for completion prescribed under Clause 58 adjustment of prices thereafter until the date of completion of the Works shall be made using either the indices or prices relating to the prescribed time for completion, or the current indices or prices, whichever is more favorable to the Employer, provided that if an extension of time is granted pursuant to Clause 28, the above provision shall apply only to adjustments made after the expiry of such extension of time.

50.7 The weightings for each of the factors of cost given in the **Appendix to Tender** shall be adjusted if, in the opinion of the Engineer, they have been rendered unreasonable, unbalanced, or inapplicable as a result of varied or additional work already executed or instructed under Clause 43 or for any other reason.

51. Retention

51.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the **Special Conditions of Contract** until Completion of the whole of the Works.

51.2 On completion of the whole of the Works, half the total amount retained shall be repaid to the Contractor and the other half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected.

51.3 On completion of the whole Works, the Contractor may substitute retention money with an "on demand" Bank guarantee.

52. Liquidated Damages

52.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the **Special Conditions of Contract** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the **Special Conditions of Contract**. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

52.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in Sub-Clause 46.1.

52.3 If the Contractor has not corrected a defects within the time specified in the Employer's notice, the Employer will assess the cost of having the defect corrected, the Contractor will pay this

56. Dayworks 56.1 If applicable, the Dayworks rates in the Contractor's Tender shall be used for small additional amounts of work only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

56.2 All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.

56.3 The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

57. Cost of Repairs

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

E. Finishing the Contract

58. Completion Certificate

58.1 The Contractor shall request the Project Manager to issue a certificate of Completion of the Works, and the Project Manager will do so upon deciding that the work is completed.

59. Taking Over

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

60. Final Account

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

61. Operating and Maintenance Manuals

60.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the **Special Conditions of Contract**.

60.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the **Special Conditions of Contract**, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount stated in the **Special Conditions of Contract** from payments due to the Contractor.

62. Termination

62.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

62.2 Fundamental breaches of Contract shall include, but shall not be

limited to, the following:

- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Project Manager;
- (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;
- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) a payment certified by the Project Manager is not paid by the Employer to the Contractor within 84 days of the date of the Project Manager's certificate;
- (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
- (f) the Contractor does not maintain a Security, which is required; and
- (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the **Special Conditions of Contract**.
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt, coercive, collusive, obstructive or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph:

"corrupt practice means the offering, giving receiving or soliciting of anything of value to influence the action of a public officer in the procurement process or contract execution;

"coercive practice" means impairing or harming, or threatening to impair or harm directly or indirectly, any party or the property of the party for the purpose of influencing improperly the action or that party in connection with public procurement or in furtherance of corrupt practice or fraudulent practice;

collusive practices" means impairing or harming, or threatening to impair or harm directly or indirectly, any part or the property of the Party for the purpose of influencing improperly the action or a part or in connection with public procurement or government contracting or in furtherance of a corrupt practice or a Fraudulent Practice

"fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Government or a public body and includes collusive practices among tenderers, prior to or after submission designed to establish tender prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition;

"obstructive practice" means acts intended to materially impede access to required information in exercising a duty under this Act;

62.3 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under Sub-Clause 62.2 above, the Project Manager shall decide whether the breach is fundamental or not.

62.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

62.5 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

63. Payment upon Termination

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

63.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

64. Property

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

65. Release from Performance

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

carried out afterwards to which a commitment was made.

- 66. Suspension of Financing**
- 66.1 In the event that the source of financing is suspended to the Employer, from which part of the payments to the Contractor are being made:
- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the financing agency's suspension notice.
 - (b) If the Contractor has not received sums due it within the 28 days for payment provided for in Sub-Clause 46.1, the Contractor may immediately issue a 14-day termination notice.
- 67. Force Majeure**
- 67.1 Notwithstanding the provisions of GCC Clauses 31 and 52, the Contractor shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

SECTION V: SPECIAL CONDITIONS OF CONTRACT

Special Conditions of Contract (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. Except where otherwise indicated, all Special Conditions of Contract should be filled in by the Employer prior to issuance of the bidding documents. Schedules and reports to be provided by Employer should be annexed.

SCC Clause	GCC Clause	Description
1	1.1	<p>A. General</p> <p>The Employer is District Executive Director, Mpwapwa District Council, P.O. Box 12 Mpwapwa.</p> <p>The Adjudicator is National Construction Council</p> <p>The Defects Liability Period is ONE YEAR.</p> <p>The Project Manager is District Engineer, P.O. Box 12, Mpwapwa.</p> <p>The name and identification number of the Contract is Construction of Intensive Care Unit (ICU) at Mpwapwa District Hospital</p> <p>Identification number is LGA/023/2021-22/HQ/W/116.</p> <p>The Start Date shall be 7 days after signing of the contract agreement</p> <p>The Intended Completion Date for the whole of the Works shall be (Contract duration is 120 days)</p> <p>The following documents also form part of the Contract:</p> <ul style="list-style-type: none"> a) Agreement b) Letter of acceptance c) Contractor's Bid d) Special Condition of contract e) General Conditions of contract f) Specifications g) Drawings h) Bills of Quantities <p>The Site is located at Mpwapwa District Hospital</p>
1.	2.	<p>2.2</p> <p>3. <i>Indicate whether there is section completion is specified: not specified</i></p> <p>4.</p>
3.	2.3(9)	<p>List other documents that form part of the contract if any:</p> <p>Not applicable</p>
4.	3.1	<p>The language of the Contract documents is English</p>

		The law that applies to the Contract is the "Laws of the United Republic of Tanzania"
5.	9.1	Include the Schedule of Other Contractors, if any. Not applicable
6.	10.1	Include the Schedule of Key Personnel. ▪ One Civil Technicians Holding at least Diploma/FTC and One Civil Engineer each Experienced with minimum of (3) years in the works of similar nature.
7.	14.1	The minimum insurance covers shall be: (a) Loss of or damage to the Works, Plant, and Materials Tshs. 3,000,000.00 (b) Loss of or damage to Equipment Tshs. 4,000,000.00 (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract Tsh. 3,000,000.00 (d) Personal injury or death Tshs. 5,000,000.00
8.	15.1	Site Investigation Reports available to the Bidder are: Not applicable
9.	22.4	The other measures include: a. Minimising the number of migrant workers employed on the project and household in the site camp b. Providing access to voluntary counselling and testing (VCT) c. Providing psychological support and health care including prevention and treatment of opportunistic infections for workers infected and affected, as well as their families d. Providing condoms (male and female) to workers
10.	24.1 & 47.1	The Site Possession Date shall be 7 days after receipt of the letter of acceptance
11.	28.2	Hourly rate of fees payable to the Adjudicator is: Types of reimbursable expenses to be paid to the Adjudicator include: a) Transport costs b) Per diem c) Documentation
12.	28.3	Arbitration will take place at Mpwapwa, Tanzania in accordance with rules and regulations published by National Construction Council, Arbitration Rules 2001 Edition.
13.	29.1	Appointing Authority for the Adjudicator: National Construction Council.
B. Time Control		

14.	30.1	The Contractor shall Submit a Programme for the Works within 7 days of delivery of the Letter of Acceptance
15.	30.3	The period between Programme updates is 10 days
20.	30.3	The amount to be withheld by the Project Manager in the case the contractor does not submit an updated programme is 3% of the contract price
C. Quality Control		
17.	38.1	The Defects Liability Period is ONE YEAR
D. Cost Control		
18	45.1	The interest rate shall be. N/A above prevailing interest rate for commercial borrowing from the contractors bank
19.	45.7	Minimum Amount of Interim Payment Certificate will be 25 percent (25%) of the contract price
20.	47.1(a)	The Site Possession Date shall be 7 days after receipt of letter of acceptance
21.	50.1	The contract is not subject to price adjustment in accordance with Clause 50 of the General Conditions of Contract
22.	51.1	The amount of retention is 5 percent (5%) of value of works of Interim Payment Certificate'
23.	52.1	The amount of liquidated damages is 0.5 percent (0.5%) of contract price per day
	52.1	The maximum amount of liquidated damages is 10 percent (10%) of the contract price
24.	53.1	The bonus for early completion is not applicable.
25.	54.1	The amount of advance payment shall be 15 percent of the contract sum payable within 28 days after provision of the security by the contractor. Not Applicable
		Monthly Recovery of Advance Payment: 20 percent of amount of Interim Payment Certificate. Not applicable
26.	55.1	The Performance Security shall be 10 percent (10%) of the contract sum. The acceptable Performance security shall be: Insurance Bond issued by a reputable insurance firm located in The United Republic of Tanzania.
E. Finishing the Contract		
27.	61.1	As built drawings shall be supplied by the contractor within 30 days after contract completion date. Operating and Maintenance Manuals shall be supplied by the contractor by within 30 days after contract completion date.
28.	61.2	The amount to be withheld by the Project Manager in the case the contractor does not submit as built drawings is 3% of contract price. The amount to be withheld by the Project Manager in the case the contractor does not submit operating and Maintenance manual is

		3% of contract price.
29.	62.2 (g)	Number of days for which the maximum amount of liquidated damages can be paid is 20 days
30.	63.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is 10 percent

2. Form of Tender

03 January, 2022

To:
District Executive Director,
Mpwapa District Council,
P.O.Box 12, Dodoma.
Tanzania.

1. We, AZHAR CONSTRUCTION COMPANY LTD of P.O.BOX 35918 Dar es salaam, offer to execute Construction of Intensive Care Unit (ICU) at Mpwapa District Hospital, Tender no. LGA/023/2021-22/HQ/W/116. in accordance with the Conditions of Contract accompanying.

This Tender for the Contract Price of TZS 248,191,642.00/=VAT Inclusive (Tanzania shillings)

The Contract shall be paid in the following currencies: (ONLY IN TZS)

Currency	Percentage payable in currency	Rate of exchange: one foreign equals [insert local]	Inputs for which foreign currency is required
(a)	100%	N/A	N/A
(b)		N/A	N/A

The advance payment required is:-

Amount	Currency
(a) 37,228,746.30	TZS
(b)	TZS

We declare that our tendering price did not involve agreements with other tenderers for the purpose of tender suppression.

We hereby confirm National Construction Council, to be the Appointing Authority, to appoint the adjudicator in case of any arisen disputes in accordance with IIT 43.1 [Adjudicator]



We are not participating, as tenderers, in more than one Tender in this tendering process other than alternative tenders in accordance with the tendering documents.

We declare that, as tenderer(s) we do not have conflict of interest with reference to ITT 3.7 [Eligibility of Tenderers]

With reference to ITT 3.11 [Eligibility of Tenderers], it is our intention to subcontract approximately *[insert the percent]* percentage of the Tender /Contract Price, details of which are provided herein.

Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the contract has not been declared ineligible by the Government of the United Republic of Tanzania under Tanzania's laws or official regulations or by an act of compliance with a decision of the United Nations Security Council.

The following commissions or gratuities of fees have been paid or are to be paid by us to agents relating to this tender, and to contract execution if we are awarded the contract:-

Name and address of agent or recipient	Amount and currency	Purpose of commission or gratuity
NONE	NONE	NONE

(if none has been paid or is to be paid, state "none")

This tender and your written acceptance of it shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Tender you receive.

We hereby confirm that this tender complies with the tender validity and Tender Security required by the tendering documents and specified in the Tender Data Sheet.

Authorized Signature: _____

Name and Title of Signatory: SPRIM SAURE RWEKANRA (Company Secretary)

Name of Tenderer: ALHAR CONSTRUCTION CO. LTD

Address: P.O. Box 3591



We are not participating, as tenderers, in more than one Tender in this tendering process other than alternative tenders in accordance with the tendering documents.

We declare that, as tenderer(s) we do not have conflict of interest with reference to ITT 3.7 [Eligibility of Tenderers]

With reference to ITT 3.11 [Eligibility of Tenderers], it is our intention to subcontract approximately *[insert the percent]* percentage of the Tender /Contract Price, details of which are provided herein.

Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the contract has not been declared ineligible by the Government of the United Republic of Tanzania under Tanzania's laws or official regulations or by an act of compliance with a decision of the United Nations Security Council.

The following commissions or gratuities of fees have been paid or are to be paid by us to agents relating to this tender, and to contract execution if we are awarded the contract-

Name and address of agent or recipient	Amount and currency	Purpose of commission or gratuity
NONE	NONE	NONE

(if none has been paid or is to be paid, state "none")

This tender and your written acceptance of it shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Tender you receive.

We hereby confirm that this tender complies with the tender validity and Tender Security required by the tendering documents and specified in the Tender Data Sheet.

Authorized Signature: _____

Name and Title of Signatory: SAUM SAEHE RWEKARA (Company Secretary)

Name of Tenderer: ALTAZ CONSTRUCTION CO. LTD

Address: P.O. Box 359



HALMASHAURI YA WILAYA YA MPWAPWA

MUHTASARI WA KIKAO CHA MAJADILIANO KATI YA HALMASHAURI NA
MKANDARASI M/S AZHAR CONSTRUCTION COMPANY LIMITED KUHUSU UJENZI
WA ICU NA UJENZI WA NYUMBA YA MTUMISHI KITUO CHA AFYA PWAGA
TAREHE 01/02/2022

WAJUMBE.

ENG. Deodatus L. Seguke-Mwenyekiti

Martina Batromeo-Mwanasheria-Mjumbe

ENG. Nuru Simkoko--Katibu

Geoege E. Mwakajinga-Afisa Ugavi-Mjumbe

Salaum Rwegasira-Mjumbe- M/S Azhar Construction Company LTD

Muhammed Seif Rashid- M/S Azhar Construction Company LTD

Muht Na. 01/2022 KUFUNGUA KIKAO

Mwenyekiti alifungua kikao mnamo 05:00 Asubuhi

Muht 02/2022 KUTHIBITISHA AGENDA

1. Kufungua kikao
2. Majadiliano kuhusu kupunguza gharama za Ujenzi wa Miradi.
3. Kufunga kikao.

Muht 03/2022: MAJADILIANO

Majadiliano yalifanyika. Wajumbe walipitia BOQ maeneo yaliyoainishwa na Mhandisi kwa ajili ya kupunguza gharama za utekelezaji wa Miradi. Maeneo yaliyoainishwa na kukubaliwa na pande zote mbili kwa ajili ya kupunguza gharama za utekelezaji wa mradi bila kuathiri ubora wa mradi. Maeneo yaliyoainishwa na kufanyiwa marekebisha ya gharama ni yafuatayo;

ICU BUILDING-AMMENDED BOQ AFTER NEGOTIATION

ON MAIN BOQ page No 3/5/12					
ELEMENT No 5, DOOR, SHOULD READ AS FOLLOW					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
A	REF. MAIN BOQ	120	M	15,000.00	1,800,000.00
D	REF. MAIN BOQ	2	NO	300,000.00	600,000.00
E	REF. MAIN BOQ	1	NO	440,000.00	440,000.00
F	REF. MAIN BOQ	2	NO	400,000.00	800,000.00
ON page No 3/8/15					
ELEMENT No 8, FINISHING					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
J	REF. MAIN	319	M2	20,000.00	



	BOQ				6,380,000.00
L	REF. MAIN BOQ	203	M2	3,500.00	710,500.00
ON page No 3/8/16					
ELEMENT No 8, FINISHING					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
C	REF. MAIN BOQ	325	M2	5,000.00	1,625,000.00
F	REF. MAIN BOQ	203	M2	566.50	114,999.50
K	REF. MAIN BOQ	22	M2	22,000.00	484,000.00
ON page No 3/10/19					
ELEMENT No 10, SANITARY WARE					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
A	REF. MAIN BOQ	4	NO	150,000.00	600,000.00
B	REF. MAIN BOQ	2	NR	200,000.00	400,000.00
D	REF. MAIN BOQ	1	NR	100,000.00	100,000.00
ON page No 3/10/20					
ELEMENT No 10, SANITARY WARE					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
A	REF. MAIN BOQ	2	NO	100,000.00	200,000.00
B	REF. MAIN BOQ	2	NR	25,000.00	50,000.00
D	REF. MAIN BOQ	2	NR	25,000.00	50,000.00
E	REF. MAIN BOQ	2	NR	60,000.00	120,000.00
ON page No 3/10/21					
ELEMENT No 10, SANITARY WARE					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
C	REF. MAIN BOQ	23	NO	2,500.00	57,500.00
G	REF. MAIN BOQ	5	NO	5,000.00	25,000.00
J	REF. MAIN BOQ	20	NO	2,500.00	50,000.00



M	REF. MAIN BOQ	12	NO	2,500.00	30,000.00
ON page No 3/10/22					
ELEMENT No 10, SANITARY WARE					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
A	REF. MAIN BOQ	10	NO	5,000.00	50,000.00
B	REF. MAIN BOQ	10	NO	5,000.00	50,000.00
F	REF. MAIN BOQ	14	NO	2,500.00	35,000.00
H	REF. MAIN BOQ	5	NO	5,000.00	25,000.00
K	REF. MAIN BOQ	4	NO	10,000.00	40,000.00
M	REF. MAIN BOQ	4	NO	10,000.00	40,000.00
N	REF. MAIN BOQ	7	NO	15,000.00	105,000.00
S	REF. MAIN BOQ	4	NO	5,000.00	20,000.00
T	REF. MAIN BOQ	22	NO	5,000.00	110,000.00
ON page No 3/10/23					
ELEMENT No 10, SANITARY WARE					
ITEM	DISCRIPTION	QUANTITY	UNITY	RATE	AMOUNT
A	REF. MAIN BOQ	60	M	5,000.00	300,000.00
B	REF. MAIN BOQ	41	NO	5,000.00	205,000.00
H	REF. MAIN BOQ	40	M	7,000.00	280,000.00
K	REF. MAIN BOQ	4	NO	5,000.00	20,000.00
L	REF. MAIN BOQ	18	NO	5,000.00	90,000.00
N	REF. MAIN BOQ	48	M	6,000.00	288,000.00
S	REF. MAIN BOQ	10	NO	10,000.00	100,000.00
ON page No 3/10/24					
ELEMENT No 10, SANITARY WARE					
ITEM	DISCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
A	REF. MAIN BOQ	2	NO	70,000.00	140,000.00
B	REF. MAIN BOQ	6	NO	10,000.00	60,000.00



C	REF. MAIN BOQ	1	NO	50,000.00	50,000.00
D	REF. MAIN BOQ	1	NO	100,000.00	100,000.00
E	REF. MAIN BOQ	1	NO	50,000.00	50,000.00
ON page No 3/11/25					
ELEMENT No 11, ELECTRICAL INSTALLATION					
ITEM	DISCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
J	REF. MAIN BOQ	22	NO	60,000.00	1,320,000.00

STAFF HOUSE-AMMENDED BOQ AFTER NEGOTIATION

ON MAIN BOQ page No 3/1/9

ELEMENT NO 1, SUBSTRUCTURE

ITEM	DISCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
A	REF. MAIN BOQ	78	M2	1,800.00	140,400.00
E	REF. MAIN BOQ	150	M2	250.00	37,500.00

ON page 3/1/8

ELEMENT NO 1, SUBSTRUCTURE

ITEM	DISCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
B	REF. MAIN BOQ	150	M2	1,000.00	150,000.00
E	REF. MAIN BOQ	150	M2	2,000.00	300,000.00
H	REF. MAIN BOQ	8	M3	250,000.00	2,000,000.00

ON page No 3/2/1

ELEMENT NO 1, SUBSTRUCTURE

ITEM	DISCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
A	REF. MAIN BOQ	7	M3	170,000.00	1,190,000.00



ON page No 3/4/11

ELEMENT NO 1, SUBSTRUCTURE

ITEM	DISCRIPTION	QUANTITY	UNIT	RATE	AMOUNT
A	REF. MAIN BOQ	198	M2	21,553.00	4,267,494.00

Maeneo tajwa hapo juu ni kazi zilizopo kwenye BOQ ambazo ndizo zilizofanyiwa majadiliano kwa ajili ya kupunguza gharama za utekelezaji wa Mradi. Hizi ndo gharama zilizokubaliwa na pande mbili za majadiliano ambazo ndo zitatumika kufanyiwa malipo kwa kazi hizo husika..

Muht 03/2022: MAJADILIANO: KUFUNGA KIKAO
Mwenyekiti alifunga kikao mnamo saa 08:00 mchana.

MUHTASARI UMETIWA SAINI NA

MWENYEKITI.....KATIBU.....

TAREHE.....



PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT



BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF
INTENSIVE CARE UNIT BUILDING

November, 2021



EDGAR G. MADEN
District Engineer
M. P. W. A
21/12/2021

GENERAL SUMMARY

GENERAL DESCRIPTIONS	AMOUNT
BILL No 01 - PRELIMINARIES 8,200,000.00	10,000,000
BILL No 02 - SPECIFICATIONS	-
BILL No 03 - MEASURED WORKS (ICU BLOCK) ... 206,412,200.00	183,231,960
BILL No 04 - PRIME COSTS AND PROVISIONAL SUMS	9,106,000
SUB-TOTAL 223,712,000.00	207,331,960
INSURANCE CLAUSES:	
• Clause 13 - Contractor to maintain in joint names of the Employer and Contractor, Insurance Against Loss and Damages to the works by fire, earthquakes, etc.	1,500,000
• Clause 54 - Performance Security	1,500,000
SUB-TOTAL (1)	210,131,960
ADD: 18% Value Added Tax (VAT)	→ 226,712,200.00
40,808,196.00	37,859,742
SUB-TOTAL (2)	248,191,642
267,520,396.00	
AMOUNT CARRIED TO FORM OF TENDER TShs.	248,191,642.

Signed by SALAM PUSCRASI PA For and on behalf of ARTAR CONSTRUCTION CO. LTD.

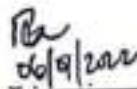
In the capacity of DIRECTOR made this 02 day of JAN 2021


NOVEMBER 2021

GS/H

PO-RALG





ITEM	DESCRIPTIONS OF WORKS	TSHS.
	<u>DESCRIPTION OF SITE:</u>	
A.	The site is located District/Councils WITHIN TANZANIA COUNTRY	
B.	The Contractor shall provide and maintain any necessary temporary roads; sleeper tracks; and temporary cross over during the execution of the works; clear away the same at completion and reinstate and make good any work disturbed to the satisfaction of the Local Authority and the Employer.	
C.	The Contractor shall be deemed to have visited the site and satisfied himself as to: <ul style="list-style-type: none"> i) The nature of the site ii) The amount of bush; rubbish or debris to be cleared away before commencement. iii) The nature of proximity and size of adjoining building and property. iv) The nature of existing communications by roads or otherwise. v) The means of access to the site. vi) The availability of land for the erection and positioning of all temporary structures; plant and materials necessary for the execution of the works. vii) The source of adequate supplies of labour, plant and materials for the completion of the works. 	
D.	If the Contractor wishes to execute trial holes before submitting his tender; he may do so in positions to be agreed with the Employer and at his sole expenses; including the reinstatement of the ground if so required by the Employer.	
E.	The whole of the site will be available to the Contractor immediately upon the issue of the order to commence.	
F.	Any sand; aggregate to or other building materials shall be the property of the Employer and shall not be used in the construction of the works without the written consent of the Employer.	
G.	The Contractor is to satisfy himself as to any difficulties that the site may present and to make all necessary enquiries to any point which in his opinion requires further elucidation as no claim for lack of information on any of the above will be entertained.	
		

NOVEMBER 2021

8/1/2

EDHAR G. MADFULA
 ASSESSOR
 21/11/2021
 ENGINEER WORKS
 MPWA WA PORALG

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<p>DESCRIPTION OF WORKS: The work within this contract comprises of: <i>Substructure, Frames, Walls, ramp, Stairs, Roof, Doors, Windows, Service Engineering, Finishings, Decorations and External Works on Construction of Intensive Care Unit Building</i></p>	
B.	<p>SINGULAR AND PLURAL Word importing the singular only also includes the plural.</p>	
C.	<p>LAW GOVERNING CONTRACT The contract shall be in all respect to be constructed and operated in accordance with the law of Tanzania.</p>	
D.	<p>METHOD OF MEASUREMENT: These Bills of Quantities have been prepared in accordance with the standard method of measurement of Building Works for East Africa first edition (metric) published by the architectural association of Kenya chapter of Quantity Surveyor Act, 1970; and applied equally to the measurement of proposed works and of variations by Quantity Surveyors.</p>	
E.	<p>Variation of 'Builder's Work' will be subject to the same amended rates of percentage of adjustment.</p>	
F.	<p>DEFINITIONS OF ABBREVIATIONS: The Contractor should take due notice of the under mentioned abbreviations:</p> <ul style="list-style-type: none"> mm - millimetres cm - centimetres M³ - cubic meters M² - square metres M - linear metres No - Number Kg - Kilograms P.C - Prime cost 	
G.	<p>The Contractor shall allow for keeping all records appertaining to the work and shall keep on the site a daily diary recording weather conditions; temperature; visitors to the site, etc.</p>	
H.	<p>The Contractor is to supply to the Employer such information as he may be required in connection with the work; including statement showing the number of men employed in all trades daily; and delivery notes (stating the name of the project) for all materials delivered to the site.</p>	
TO COLLECTION TSHS.		



NOVEMBER 2021

B/1/3

PO-RAIG

R. De

R. De

R. De

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	EMPLOYER'S INSPECTION: No work shall be covered up until it is inspected and approved by the Employer.	
B.	The Employer may at any time before the end of defects liability period or during any extended time where any defect are being made good, instruct the Contractor to open up; pull down; test or expose any part of the works in order to satisfy himself as to the quality of materials or workmanship used. If in the opinion of the Employer such parts are not in strict accordance with the contract documents he may order the Contractor to remove all defective work, replace with approved materials and reinstate any such part of the works and any other disturbed at his own expenses and to the entire satisfaction of the Employer. If any such parts of the works are found to be in accordance with the contract documents the Contractor will be reimbursed with the General conditions of contract.	
C.	DISTURBANCE OR NUISANCE: The Contractor shall allow for taking all necessary precautions in the order and execution of the work so as to avoid causing disturbance or nuisance to the occupants of existing buildings and those adjacent to the works and for complying with the Employer's instructions in this respect. The Contractor shall be in tort for such nuisance and shednets.	
D.	TRESPASS, DAMAGE AND CARE OF WORKS: The Contractor shall prevent any trespass on the opinion adjoining property and he shall take all reasonable precautions during the progress of the contract to prevent any damage to the adjoining property or plant or private roadways and to prevent material; plant; rubbish and debris; etc. collecting on the adjoining property or roadways.	
E.	Should the Contractor wish to erect scaffolding or to make use of adjoining property; he shall obtain prior permission from the Employer and clear away at a completion of his work or when directed and make good any damage to his satisfaction. Except as provided for in the General conditions of contract; the Contractor; shall be held responsible for the care of works generally until their completion; including all works executed and materials deposited on the site by himself or his Sub-Contractors or supplier together with all risks arising from weather; carelessness of operatives; damages and he shall make good all such damage or loss at his own expense	
F.	The Contractor shall be responsible for the protection of any adjacent building; boundary walls; fences; services either overhead or underground and for the making good of or paying for all damage thereto; should such be caused in the course of building operations.	
G.	The Contractor shall allow for making good all damage to the road; kerbs; surface water channels; etc. occasioned by heavy traffic; delivery of materials and building operations generally to the entire satisfaction of the Employer and shall be responsible for observing any by-law of Local Authority regarding keeping the road free from mud; filth dirt; etc. out of the execution of the works.	
TO COLLECTION TSHS.		C



NOVEMBER 2021

8/1/4

EDGAR L. MADENGA
 DIST. ENGINEER WORKS
 21/12/2021
 PO-RAIG

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<u>PROTECTION FROM THE WEATHER:</u> The Contractor shall allow for covering up and protecting all new work from injury by weather or any other cause. Any damage, loss or expense caused by non-compliance with the clause shall be at sole risk of the contract.	
B.	<u>TOOLS, PLANT AND SCAFFOLDING:</u> Provide all necessary cranes, hoists, concrete mixer and other plant including ladder, staging, access gangways tackle, tarpaulins, tools, moulds templates and other requisites necessary for proper executing, adapting from time to time as may be necessary and maintain all plant and equipment during the course of the contract.	500,000
C.	The Contractor shall allow for providing adapting from time to time as may be necessary and maintaining all scaffolding scaffold boards and temporary staging, etc, necessary for the execution of the works.	
D.	The Contractor is to provide everything necessary for the proper execution of the works according to the true intent and meaning of the drawings; etc. whether the same may or may not be particularly shown on the drawings; specifications provided that the same is reasonably to be inferred there from.	
E.	<u>SITE ACCOMMODATION:</u> The Contractor shall provide and maintain any necessary temporary office accommodation required by himself and his Sub-Contractors suitably equipped with desks; chairs; drawing boards; and electric lighting and telephone.	
F.	The Contractor shall provide and maintain for his workers latrine facilities washing and drinking water, first aid equipment's and shelters equipped with tables; benches and checking facilities all to the reasonable satisfaction of the workers and approved by the Employer and Health Authorities.	
G.	The Contractor shall provide and maintain any temporary storage, shed or buildings which in his opinion are necessary for himself and his Sub-Contractors for the execution of the works.	
H.	<u>WATER FOR THE WORKS</u> The Contractor shall allow for all necessary clean fresh water for the works, including that required by Sub-Contractors and for any temporary plumbing metres and storage facilities and pay all charges in connection therewith and clear away on completion and make good works disturbed.	100,000
J.	The Contractor shall allow for providing and maintaining a temporary electricity supply for the works including that required by Sub-Contractor and for any meters and fittings to give artificial lighting and power necessary for the execution of the works and pay all charges, in connection and make good all works disturbed.	
TO COLLECTION TSHS.		6,000,000

NOVEMBER 2021

06/07/2022

06/07/2022 8/1/5

PO-RALG

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<u>WATCHING AND LIGHTING:</u> The Contractor shall allow for providing and maintaining any barriers; hoarding; watching; lighting which must comply with the By-laws of requirements of the Local Authority and policy regulations and the Contractor must give all requisite policies to those authorities and provide everything necessary to protect the general public workmen; plant; materials and the whole of the works	200,000
B.	No advertisement will be permitted without the written authority of the Employer.	
C.	<u>SIGN BOARD:</u> The Contractor shall provide and erect a large sized sign board on the site showing the title of the contract, the name and address of the Employer; consultant, nominated suppliers and Sub-Contractor and such information as may be required by the Employer who shall provide the sign layout and colours of the Board. The board shall be repainted when necessary and removed when no longer required.	200,000
D.	<u>PROTECTION:</u> The Contractor is required to protect works section until completion.	
E.	<u>TESTING:</u> Allow for testing all the installations required to be tested and provide everything necessary for this purpose and leave the whole in perfect working order to the satisfaction of the Employer and Local Authority.	
F.	<u>REMOVING RUBBISH AND CLEANING:</u> The Contractor shall make good all defects and injuries to the works, clean down external faces wash off stains to face work, clean off marks mortar and cement, clean windows inside and out, scrub floors, flush drains run and leave all parts of the works clean, free from rubbish and waste materials and perfect on completion.	
G.	The Contractor shall clean and cart away all rubbish as it accumulate and keep the works in orderly condition to the satisfaction of the Employer	
	TO COLLECTION	* 2,200,000
	<u>COLLECTION</u>	
	Page No. 8/1/1	
	Page No. 8/1/2	
	Page No. 8/1/3	
	Page No. 8/1/4	16,000,000
	Page No. 8/1/5	400,000
	BILL No. 11 PRELIMINARIES CARRIED TO GENERAL SUMMARY	* 10,000,000

NOVEMBER 2021



8/1/6

EDGAR L. MADIMBA FOR SIG
 #12/12/2021 PWA

06/01/2022 06/01/2022

ITEM	DESCRIPTION	QTY	UNIT	INTENSIVE CARE UNIT BUILDING	
				RATE	AMOUNT
A	<u>Filling</u> Sand filling in making up levels; average 200 mm thick	41	m³	15,000	615,000
	<u>Hardcore and the like</u>				
B	150 mm thick beds; levelled compacted and blinded to receive damp proof membrane	326	m²	10,000	3,250,000
	<u>Soil Sterilization</u>				
C	Chemical anti termite treatment around the building plinth	99	m	1,500	148,500
D	Aldrin solution applied at a rate of 7 litres per square metre	325	m²	1,500	487,500
	<u>Concrete works</u> <u>In situ concrete plain grade 10' mix ratio (1:4:8)</u>				
E	50mm Thick blinding	8	m²	13,000	104,000
	<u>Plain in-situ concrete; grade 15N/eq. mm nominal mix (1:3:6)</u>				
F	100mm Bed	325	m²	10,000	3,250,000
G	Ditto to Ramp	30	m²	25,000	750,000
H	Steps	1	m²	250,000	250,000
J	Strip foundation	18	m²	250,000	4,500,000
	<u>Vibrated Reinforced in-situ concrete; grade 20 nominal mix (1:2:4)</u>				
K	Column bases	4	m²	260,000	1,040,000
L	Plinth beam	9	m²	260,000	2,340,000
M	Columns	1	m²	260,000	260,000
	<u>Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent</u>				
N	16mm Diameter bars	508	kg	300	1,524,000
P	12mm Diameter bars	280	kg	300	840,000
Q	8mm Diameter bars	312	kg	300	936,000
To Collection				20,405,000	20,465,000

NOVEMBER 2021

To Collection

P.O. Box 35918
Tel: 0707 021 444

DAR ES SALAAM

EDGAR K. MADEMOTO-ALLO

Hatch

OFFICE ENGINEER WORKS

21/12/2021 WADWA

11/11/21

5

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Sawn formwork to</u>				
A	Vertical sides of columns;	8	m ²	20,000	160,000
B	Vertical sides of plinth beam	78	m ²	15,000	1,170,000
C	Vertical edge of bed, and the like over 75mm but not exceeding 150mm high	77	m	4000	208,000
D	Ditto to Ramp edge ditto	13	m	4000	52,000
E	Ditto to Steps 150mm high	12	m	4000	48,000
	<u>Walling</u>				
	<u>Concrete block B.S 2028 type A: 3.5N per square millimetre; solid in cement sand mortar (1:4)</u>				4,242,000.00
F	230mm Thick wall	101	m ²	42,000	4,242,000
	<u>Damp-proof Courses (DPC)</u>				
G	230mm Wide Hessian based bitumen laid horizontally on solid blockwork	131	m	2000	262,000
	<u>Damp-proof Membrane (DPM)</u>				
H	500 Gauge polythene sheet laying on blinded hardcore with 150mm sides and end laps	325	m ²	2800	910,000
	<u>Sundries</u>				
J	12mm Cement and sand (1:3) external rendering to concrete block wall	50	m ²	4000	200,000
K	Prepare and apply two coats of black bituminous paint on rendered or concrete surfaces, externally	50	m ²	4000	200,000
	<u>To Collection</u>				3,976,000
	<u>COLLECTION</u>				
	Page 2/1/1				3,369,000
	Page 2/1/2				29,400,000
	Page 2/1/3				3,976,000
	<u>ELEMENT NO. 1 - SUBSTRUCTURE</u>				
	<u>CARRIED TO SUMMARY</u>			31,522,200	27,750,200

NOVEMBER 2021

3/1/9

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 2 - FRAME					
<u>Concrete work</u>					
<u>Vibrated Reinforced in-situ concrete; grade 20 nominal mix (1:2:4)</u>					
A	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	11	m ³	280,000	2,860,000
B	Columns	3	m ³	280,000	789,000
C	150mm thick suspended roof slab	10	m ²	39,500	395,000
D	150mm thick suspended roof gutter	65	m ²	34,000	2,215,000
E	150mm thick suspended gutter side walls	80	m ²	39,000	3,120,000
<u>Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent</u>					
F	16mm Diameter bars	200	kg	31.00	6,200.00
G	12mm Diameter bars	1720	kg	31.00	53,320.00
H	8mm Diameter bars	335	kg	31.00	10,385.00
<u>Sawn formwork to</u>					
J	Vertical sides of column	25	m ²	15,000	375,000
K	Horizontal sides and soffits of beams	119	m ²	20,000	2,380,000
L	To soffits of roof slab	10	m ²	15,000	150,000
M	To soffits of gutter	64	m ²	15,000	960,000
N	To sides of walls	160	m ²	20,000	3,200,000
ELEMENT NO. 2 - FRAME CARRIED TO SUMMARY				23,740,500	16,367,700

NOVEMBER 2021



EPHRAIM G. MABEMBA
 DISTRICT ENGINEER
 21/12/2021
 PO-RALG
 WORK

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO4: WALLS					
<u>Block Work</u>					
<u>Internal wall</u>					
<u>Solid Concrete block B.S 2028 type A: with strength 5MPa bedded and jointed in cement sand mortar(1:4)</u>					
A	150mm Wall	181	m ²	20,000	3,620,000
<u>External wall</u>					
<u>Solid Concrete block B.S 2028 type A: abd above.</u>					
B	230mm Wall	265	m ²	35,000	9,275,000
C	250x100mm window cill	3	m	25,000	75,000
<u>Metal Work/Partitions Works</u>					
<u>Powder coated 'Malt charcoal glazed Aluminium partitions to Architects design and approval, neoprene gaskets for bedding nylon brusher at head meeting stiles, and rails and stainless steel screw approved by Architect complete with 6mm single clear glass 1800mm high up to ceiling level after 1000mm high blockwall from floor finished level including bedding in approved compound and fixing to concrete background</u>					
D	Partition with frame filled inwith 6mm glass as per detailed Architerral drawings with 3Nr.of doormeasured separately (m	22	m ²	150,000	3,300,000
<u>Powder Coated 'Matt Charcoal' aluminium doors to pattern neoprene gaskets for bedding nylon brusher at head meeting stiles, stainless steel screws and all necessary ironmongery to approval of Architect including bedding in approved compound in concrete background</u>					
E	40mm Thick door size 1200 x 2100mm high double swing door divided into two panels comprising of 40 x 70mm stiles, top, middle and bottom rail, lower panel filled in with and including 6mm thick MDF board 1000mm high infill, upper panell filled in with and including 6mm thick clear glass, complete with overhead door closer and other necessary ironmongery	3	No	800,000	2,400,000
ELEMENT NO4: WALLS CARRIED TO SUMMARY					18,670,000

NOVEMBER 2021

3/4/11

PO-RALG



06/01/2022

06/01/2022

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO 5: DOORS					
<u>Frames Hardwood materials</u>					
(A)	50x150mm Frame with one labour	120	m	150,000 36,000	180,000 3,600,000
B	50x150mm Frame with one labour	15	m	20,000	450,000
C	25 x 25mm Glazing beads	42	m	10,000	420,000
<u>Prime Quality Hardwood Paneled Doors</u>					
(D)	40mm Thick paneled double door size 1500 x 2100mm high comprising of 40x125mm rebated stiles, 40x125mm rebated top, middle and intermediate rail; 40x200mm bottom rail; divided into five panels; four equal vertical panels two on top and two on bottom each size 218x550mm; and a horizontal panel in between size 580x300mm; all panels filled in with and including 40mm thick hardwood boards.	2	No	300,000 600,000	600,000 1,200,000
(E)	Ditto size 1200x2100mm high Double door	1	No	440,000 549,000	440,000 549,000
(F)	Ditto size 900x2100mm high	2	No	500,000 400,000	1,000,000 800,000
<u>Flush door</u>					
G	Doors: formica plastic laminated facing both sides cherry Mkongo or Mninga or equal aproved hardwood lipping to all edges; solid core flush door; formic; storm grey with hardwood edge strip; 45mm thick MDF doors overall size 1500 x 2100mm, double swing door	1	Nr.	400,000	400,000
H	Ditto but size 900x2100mm Single leaf	12	Nr.	400,000	4,800,000
J	Ditto with size 800x2100mm Single leaf	2	Nr.	350,000	700,000
<u>Ironmongery: supply and fix the following as manufactured by UNION "or other equal and approved to hardwood with matching screws"</u>					
K	150mm Brass butt hinges.	27	Pairs	15,000	405,000
L	3 Lever Mortice lock	8	Nr.	65,000	520,000
M	Two Lever Mortice lock	14	Nr.	60,000	840,000
N	Stainless steel Heavy duty door closer	4	Nr.	90,000	360,000
P	Double Action Swing Hinges for hardwood door approx 25 - 50Kg	6	pairs	20,000	120,000
<u>Clear glass</u>					
Q	5mm thick glass including beads glass over 0.5m ² not exceeding 1.00m ²	15	m ²	40,000	600,000
ELEMENT NO 5: DOORS CARRIED TO SUMMARY				15,925,000	15,970,000

NOVEMBER 2021



EDGAR G. MADEIRA FORALG
 District Engineer Works
 21/12/2021 W A B W A

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO 6: WINDOWS					
<u>Aluminium glazing approved by the Architect; single glazed combination frame and windows, 45 x 50mm Aluminium section framing, all mullions and transoms; epoxy powder coat RAL 9006 finish, 6.14mm laminated glass pre assembled with stainless steel plates and screws window ironmongery, glazed beads, fiber mosquito net, rubber gaskets and backer rods and fixing to masonry or concrete grounds, sealing all around with non-hardening EPDM silicone sealant; screws bolts and fasteners</u>					
A	Window Size 1500 x 1800mm high	2	Nos	486,000	972,000
B	Diffa, Size 1500 x 1050mm high	16	Nos	283,500	4,536,000
C	Diffa, Size 900 x 1050mm high	6	Nos	179,000	1,074,000
Composite Items					
<u>Supply and fix weldable Mild steel to smooth edges window grills comprising of 75 x 75 mm RHS framework and braces, 25x25mm top, bottom, vertical and horizontal bars welded to frames spaced at 150mm centre to centre including oil paints</u>					
D	Diffa, Size 1500 x 1800mm high	2	Nos	202,500	405,000
E	Diffa, Size 1500 x 1050mm high	16	Nos	124,000	1,984,000
F	Diffa, Size 900 x 1050mm high	6	Nos	80,000	480,000
ELEMENT NO6:WINDOWS CARRIED TO SUMMARY					7,997,000

NOVEMBER 2021

3/6/13

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO.7: ROOFING					
<u>Sawn soft wood: Impregnated with Preservatives</u>					
A	50X150mm Tie Beam	276	m	7000	1,932,000
B	50X150mm Rafter	285	m	7000	1,995,000
C	50X100mm Kingpost and struts	510	m	6500	3,315,000
D	50X100mm Wall Plate	99	m	6500	643,500
E	50X75mm Purlins	473	m	2000	1,496,000
<u>Wrot soft wood: 'Podo'</u>					
F	20X250mm Fascia/Barge boards	30	m	15,000	450,000
<u>28 gauge IT5 corrugated iron roofing sheets fixed to timber purlins with 150mm end laps, 1 1/2 corrugations side laps fixed with roofing nails</u>					
G	Roof covering: sloping not exceeding 45 degrees from horizontal	396	m ²	32,000	12,672,000
H	Ridge capping	40	m	18,000	720,000
J	Valley capping	12	m	18,000	216,000
<u>Metal Works</u>					
K	16mm Diameter Anchor Bolts	64	No	14,000	640,000
L	10mm thick steel plate	32	No	25,000	800,000
<u>Roof drainage:</u>					
M	200mm Diameter UPVC class C rainwater down pipe neck with 710mm projection. With all accessories	32	M	35,000	1,120,000
N	200mm down pipe shoe	8	No	15,000	120,000
P	200mm Diameter nozzle outlet.	8	No	15,000	120,000
Q	Floor drain: 200mm diameter/full bore	8	No	45,000	360,000
ELEMENT NO. 07- ROOFING CARRIED TO SUMMARY					26,522,500
					26,522,500

NOVEMBER 2021



EDGAR G. MADENLA
 District Engineer Works
 21/12/2021

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO8: FINISHINGS					
<u>In situ finishings</u>					
<u>Plastering in two coats steel trowelled to smooth finish internally</u>					
A	15mm To walls	590	m²	7000	4,130,000
B	15mm to sides of columns	25	m²	7000	175,000
C	Horizontal sides and opening soffits of beams	108	m²	7000	120,000
D	To soffits of roof slab	10	m²	7000	70,000
E	To soffits of gutter	64	m²	7000	448,000
F	To sides of walls	160	m²	7000	1,120,000
<u>Plastering in two coats steel trowelled to smooth finish externally</u>					
G	22mm To walls	265	m²	7000	1,855,000
TILES, SLAB OR BLOCK FINISHINGS					
<u>Glazed ceramic wall tiles with cushion edges to BS 1281 fixed to backings with cement sand mortar and pointing with white cement</u>					
H	400 x 250 x 8mm Tiling to walls	37	m²	30,000	1,110,000
<u>Granit GN 572 Mid Grey porcelain tiles "high quality" bedding in premixed thin set cement mortar and grouting with coloured sandless tile grout</u>					
J	600x600x9mm; 4mm diagonally/square joints ways; to floors levels	319	m²	20,000 4,000	12,760,000 6,380,000
K	400 x 400 x 8mm; 4mm diagonally/square joints ways to floor levels of toilets	6	m²	50,000	300,000
L	150mm Thick skirting	203	m	7000 3500	1,421,000 710,500
To Collection				24,145,000	17,765,000

NOVEMBER 2021

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUNDRIES				
	<u>Floor edge strips</u>				
A	GENESIS ESA 10(10mm high) or similar and approved, aluminium straight edge trim; junctions of flooring finishes	31	m	900	15,100
	<u>Weather Bars</u>				
B	6 x 25mm Brass weather bar strip at external door thresholds; in prepared groove	4	m	100,00	40,000
	<u>Beds and Backings</u>				
	<u>Cement and sand (1:4) wood floated surface finish</u>				162,500
C	32mm Bed to receive floor tiles	325	m²	5000 11,000	3,575,000 370,000
D	12mm Backing to receive wall tiles	37	m²	10,000	
	<u>Gypsum plasterboard BS 1230 Pt. 2 1970 tapered wallboard self tapping galvanized drive screws</u>				
E	9mm Thick ceiling; horizontal; internal	315	m²	16,000	5,040,000
F	Cornice	203	m	566.5 5000	115,000 1,015,000
G	Extra over for ceiling access 600 x 600mm.	1	nr	40,000	40,000
H	Supply and fix PVC ceiling complete including PVC and corner joint, shoe, nail and accessories	95	m²	10,000	950,000
	<u>Sawn softwood pressure impregnated with preservatives</u>				
J	50x50mm bracker fixed at 600mm centre to centre	914	m	2500	2,285,000
	<u>Tanga stone or equal and approved other materials</u>				
K	Wall finishing materials to the external façade as per drawings	22	m²	45,000 22,000	990,000 4,840,000
To Collect				14,820,000	13,920,000

NOVEMBER 2021



EDGAR G. MADEMLA PO-RALG
DISTRICT ENGINEER WORKS
MPWA PWA
21/12/2021

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
SLAB TREATMENT					
<u>Water proofing to exposed surface concrete treatment for permanent corrosion free water/ Moisture proofing by using by using krystol technology</u>					
<u>Thoroughly clean concrete surfaces to remove all types of dirt; fill all visible cracks, honeycombs and holes as per krystol specification No 1; sand surface to smooth level prepare and apply full coat of krystol T2; protect and cure properly as per manufacture's direction and krystol specification</u>					
A	To roof slabs.	10	M ²	10,000	100,000
B	To sides and bottom of concrete gutters.	225	M ²	10,000	2,250,000
C	Allow sum for LOGO for writing ICU INTENSIVE CARE UNIT to respective name of the council Hospital As per elevation by using ALUCOBOND Materials		Sum	200,000	200,000
<u>To Collection</u>					2,850,000
COLLECTION					
Page 2/8/1				24,145,000	17,765,000
Page 2/8/2				14,820,000	13,920,000
Page 2/8/3				2,850,000	2,850,000
ELEMENT NO 08: FINISHINGS				41,815,000	34,535,000
CARRIED TO SUMMARY					

NOVEMBER 2024

3/8/17

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 9: PAINTING AND DECORATIONS				
	<u>Internal works</u>				
	<u>Prepare and apply one thinned coat and two full coats of wash 'n' ware paint</u>				
A	Plastered walls, columns, beams etc	877	m ²	7000	6,139,000
B	Gypsum ceiling	315	m ²	7000	2,205,000
	<u>External works</u>				
	<u>Prepare and apply one thinned coat and two full coats of weather guard paint to</u>				
C	Rendered surfaces	265	m ²	7000	1,855,000
	<u>Varnishing: Internal work prepare and apply three coats of clear polyurethane clear varnish; wood surfaces.</u>				
D	General surfaces	42	m ²	4000	168,000
E	Frames, linings and associated mouldings 200-300mm girth	120	m	2000	240,000
	ELEMENT NO. 9: PAINTING AND DECORATIONS CARRIED TO SUMMARY				10,607,000

NOVEMBER 2021



EDWAR G. MADEMLA

H. H. H. H.

21/12/2021

21/12/2021

H. H. H. H.

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 10: SANITARY WARE INSTALLATIONS					
WASH HAND BASIN					
A	White vitreous wash hand basin (HWB), size 750x440x200mm complete with self closing; semi pedestal and chain stay hole; fairline 1/2in pillar taps with clear acrylic handles; 1 1/2in bead chain waste and plug; 80cm slotted tail bolt stay; isovalve servicing valves. rubber plug with slotted tail; 32mm plastic bottle trap with 75mm seal. And other accessories as manufactured by castlware or equal and approved	4	No	200,000 150,000	1,200,000 600,000
SLUICE SINKS					
B	B22362 Wall Mounted slop Hopper with Draining Board stainless steel slop hopper manufactured from Grade 304 stainless steel for the efficient and hygienic disposal of waste including draining boards, top slab, integral flushing rim, standard outlet for PVC sewerage systems Either P-trap or S-trap and the unit must be space-effective as per manufactured to the approval of Project Manager/ Engineer	2	Nr.	50,000 200,000	1,100,000 400,000
SOAP DISH					
C	Ceramic soap dish Model A:101 as manufactured by castlware or equal aproved including fixing fixtures, fixed to the wall as per manufacturer recommendations	2	Nr.	20,000	40,000
KITCHEN SINK					
<u>Stainless steel kitchen single with single drainer complete with tap hole provided on the sink the waste unit as manufactured by castlware; sink Model No. D10050A including all fixing fixtures</u>					
D	Overall size L1000 X W500mm x D180mm bowel size L380 x W330mm	1	Nr.	100,000 40,000	100,000 40,000
To Collection					2,790,000

NOVEMBER 2021

3/10/19

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 10: SANITARY WARE INSTALLATIONS				
	WASH HAND BASIN				
A	White vitreous wash hand basin (HWB), size 750x440x200mm complete with self closing; semi pedestal and chain stay hole; fairline 1/2in pillar taps with clear acrylic handles; 1 1/4in bead chain waste and plug; 80cm slotted tail bolt stay; isovalve servicing valves, rubber plug with slotted tail; 32mm plastic bottle trap with 75mm seal. And other accessories as manufactured by castlware or equal and approved	4	No	200,000 1,500,000	1,200,000 6,000,000
	SLUICE SINKS				
B	B22362 Wall Mounted slop Hopper with Draining Board stainless steel slop hopper manufactured from Grade 304 stainless steel for the efficient and hygienic disposal of waste including draining boards, topislab, integral flushing rim, standard outlet for PVC sewerage systems Either P-trap or S- trap and the unit must be space -effective as per manufactured to the approval of Project Manager/ Engineer	2	Nr.	550,000 200,000	1,100,000 4,000,000
	SOAP DISH				
C	Ceramic soap dish Model A:101 as manufactured by castlware or equal aproved Including fixing fixtures, fixed to the wall as per manufacturer recommendations	2	Nr.	20,000	40,000
	KITCHEN SINK				
	<u>Stainless steel kitchen single with single drainer complete with tap hole provided on the sink the waste unit as manufactured by castlware; sink Model No. D10050A including all fixing fixtures</u>				
D	Overall size L1000 X W500mm x D180mm bowel size L380 x W330mm	1	Nr.	100,000 450,000	1,000,000 450,000
	To Collection				2,790,000

NOVEMBER 2021

3/10/19

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>WC</u>					
A	Eastern type low level W.C sulle vitrious china to B.S 3402 s/p-trap, 9litres flushing tank with single push button complete with all necessary accessories, "Casterware"	2	No	100,000 200,000	200,000 400,000
<u>TOILET PAPER ROLL HOLDER</u>					
B	Wall mounted stainless Toilet paper holder Model BC 70 complete with fixing accessories as manufactured by castlware or equal and approved	2	Nr.	25,000 50,000	50,000 100,000
<u>SHATTAF</u>					
C	Wall mounted 'trigger spray' shattaf Oasis chrome finish complete with fixing accessories as manufactured by castlware or equal and approved	2	Nr.	20,000	40,000
<u>BRUSH HOLDER</u>					
D	Toilet brush holder 'model : BC 60 as manufactured by castlware or equal and approved including all fixing fixtures	2	Nr.	25,000 50,000	50,000 100,000
<u>MIRROR</u>					
E	600 X 800 X4mm Thick mirror with JX -S501 as per castlware or other approved, fixed on lacquer with double sided self adhesive pads finished with bevelled edges.	2	Nr.	60,000 120,000	120,000 240,000
<u>FLOOR DRAIN</u>					
F	150 X150mm stainless steel grating ABS flange with adptor or ring complete with kerdin-fix bounding compound, all as to manufacturers recommendations	3	Nr.	40,000	120,000
<u>To Collection</u>					1,000,000

NOVEMBER 2021



EDGAR G. MADEMLA
 District Engineer Works
 M.P.W.A.P.B.A.S
 21/11/2021

06/01/2022 06/01/2022

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
COLD WATER INSTALLATION:					
<u>IPS pipes, Class D painted with special paint; including joints in running length. Fixing in accordance with manufacture's instructions.</u>					
<u>Distribution pipes:</u>					
<u>IPS pipes including screwed and socketed joints in running length:</u>					
A	25mm Diameter Polypipe, class D	50	M	3500	175,000
B	19mm Diameter Polypipe, class D	45	M	3500	157,500
				2500	57,500
				5000	115,000
C	Extra; elbow	23	No		
D	Ditto connectors	5	No	5000	25,000
E	Ditto Union	5	No	5000	25,000
F	Ditto Tee	5	No	5000	25,000
G	Ditto Reducing bush 25 x 19mm	5	No	10,000	50,000
				5,000	25,000
H	19 mm Diameter supply IPS pipes; in blockwork chase.	18	M	3500	63,000
				2500	50,000
J	Extra ditto; elbow	20	No	5000	100,000
K	Ditto tee	10	No	5000	50,000
L	Ditto: Union	10	No	5000	50,000
				2500	60,000
M	Ditto: Nipple	12	No	5000	30,000
N	Ditto: connector	1	No	5000	5000
P	Ditto: tee connector	1	No	5000	5000
Q	13 mm Diameter supply IPS pipes; in blockwork chase.	12	M	3500	42,000
To Collection					947,500

NOVEMBER 2021

3/10/21

PO-RALG

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
(A)	Extra reducing tee 19x19x13	10	No	5000 10,000	50,000 100,000
(B)	Extra; reducing bush 19x13	10	No	5000 10,000	50,000 100,000
C	Extra; 13mm elbow,	3	No	5000	15,000
D	Ditto; tee,	3	No	5000	15,000
E	Ditto; Nipple	6	No	5000	30,000
(F)	Ditto; socket	14	No	5000 2500	70,000 35,000
<u>Flexible piping:</u>					
G	Flexible pipe to cistern	2	No	10,000 5000	20,000 50,000
(H)	Flexible pipe to Hand Wash Basin and kitchen Sink	5	No	10,000	20,000
J	Flexible pipe to sluice	2	No	10,000 19,000	40,000 80,000
(K)	Angle valve	4	No	25,000	50,000
L	Bib tape pex 1/2	2	No	10,000 30,000	40,000 120,000
(M)	Pillar tape pex 1/2	4	No	25,000	100,000
(N)	Stop cock pex 3/4	7	No	25,000 15,000	175,000 105,000
<u>GENERAL ITEMS</u>					
P	Thread seal tape	5	No	15,000	75,000
Q	Shellack	1	No	20,000	20,000
R	Tangit	1	No	40,000 5000	40,000 20,000
(S)	Bolts pairs 12mm length 100mm or 125mm	4	No	10,000	40,000
(T)	Fisher plug pairs	22	No	5,000 10,000	110,000 220,000
TO COLLECTION					1,240,000

NOVEMBER 2021



EDUAR G. MADEIRA ✓
 PO-RALG
 D/ E.P.E. WORKS
 21/12/2021

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
	<u>UPVC pipes; Class 'E'; including fittings in running length.</u>				200,000
(A)	38mm Diameter pipe; in chase in block work.	80	M	5000 19,000 5000 10,000	600,000 2,050,000 419,000
(B)	Extra; Equal tee 38x38x38mm.	41	No	10,000	300,000
C	Extra; elbow	30	No	10,000	60,000
D	Ditto; Plug	6	No	10,000	150,000
E	Extra; tee	15	No	10,000	20,000
F	Ditto; bend	2	No	10,000	50,000
G	Ditto; socket female thread	5	No	10,000	280,000
(H)	50mm pipe	40	M	7,000 14,000	560,000
J	Ditto; bend	2	No	10,000	20,000
(K)	Ditto; socket female thread	4	No	5,000 10,000	40,000
(L)	Plug	18	No	10,000 3,000	180,000 90,000
	<u>SOIL AND PIPES:</u>				
	<u>UPVC pipes and fittings; Class 'B'; in running lengths; BS 4660 for underground pipes and B.S 3506 for pipes above ground.</u>				
(M)	50mm. Diameter pipes; fixed to walls.	12	M	10,000 6,000	120,000 288,000
(N)	100mm Diameter pipes laid in trenches.	48	M	12,000	576,000
P	Extra; 100mm Elbow	2	No	20,000	40,000
Q	100mm Diameter PVC vent coil.	1	No	15,000	94,000
R	P-Trap 4'	4	No	15,000	60,000
(S)	Bottle trap flexible 38mm	10	No	20,000 10,000	200,000 100,000
TO COLLECTION					2,140,000

NOVEMBER 2021

3/10/23

PO-RALG

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
FIRE FIGHTING INSTALLATIONS:					
A	9Kg. dry powder 'NAFFCO' or any other equal and approved fire extinguishers, fixed to wall with and including brackets plugged on block work.	2	No	70,000 120,000	140,000 240,000
GULLY TRAPS					
B	Construct a standard gully trap 300x300x300mm deep; in thick concrete block walls complete with benching and all fittings and gully trap cover	6	No	10,000 50,000	60,000 300,000
TESTING					
C	Allow for testing and commissioning the whole plumbing and drainage installation as per service Engineer approval	-	Item	-	50,000 200,000
D	Builders work in connection to plumbing	-	Item	-	100,000 200,000
SUNDRIES:					
E	Allow for preparation and production of four (4) copies of 'AS BUILT DRAWINGS' of plumbing and engineering installations to Engineer's satisfaction.	-	Item	-	50,000 200,000
COLLECTION				1,140,000.00	1,340,000
COLLECTIONS					
	Page 3/10/1				2,790,000 ✓
	Page 3/10/2				1,000,000 ✓
	Page 3/10/3				947,900 ✓
	Page 3/10/4				1,240,000 ✓
	Page 3/10/5				3,440,000 ✓
	Page 3/10/6			1,140,000	1,340,000 x
ELEMENT NO. 10 SANITARY WARE AND INSTALLATIONS CARRIED TO SUMMARY					10,757,000
				10,557,000.00	

NOVEMBER 2021



EDUAR G. MADEIRA

Attestation

Bj DE

PO-RALG

21/11/2021
DISTRICT ENGINEER WORKS
MPWA PWA

13

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NR.11- ELECTRICAL INSTALLATION					
Power Distribution.					
A	4Ways TPN distribution board (DB 3) with 100A/300mA RCCB incomer and outgoing MCBs as shown in Schematic diagram as ABB or approved equal.	1	No	120,000	120,000
B	4C x16 mm ² Cu,PVC/PVC cable from nearby Tanesco LV Pole to Distribution Board(DB 1).	25	Lm	35,000	875,000
Small Power Distribution					
C	25mm Heavy duty PVC Conduity concealed under walls and roof for all power and Data points	100	Nos	3,000	300,000
D	Single core 2.5 sqmm PVC copper cables from distribution Boards to all power outlet points	3	Roll	110,000	330,000
	Red Wire	3	Roll	110,000	330,000
	Black Wire	3	Roll	110,000	330,000
	Green Wire	3	Roll	110,000	330,000
E	Twin switch socket ABB or other equal approved	21	Nos	25,000	525,000
F	Telecommunications outlet box	20	Nos	15,000	300,000
Light Fittinas					
G	20mm Heavy duty PVC Conduity concealed under walls and roof for all Lighting and DataFire points	180	Nos	3,000	540,000
H	Single core 1.5 sqmm PVC copper cables from distribution Boards to all lighting and ceiling fans outlet points	6	Roll	80,000	480,000
	Red Wire	6	Roll	80,000	480,000
	Black Wire	6	Roll	80,000	480,000
	Green Wire	6	Roll	80,000	480,000
J	TYPE A:1 x 36W, 1200mm standard, fluorescent fitting as LIGHTING DIRECT PHOENIX	22	Nos	120,000 60,000	2,640,000 1,320,000
				11	7,730,000

NOVEMBER 2021

3/11/25

PO-RALG



ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	56" Blade National Ceiling fan c/w fan regulator	4	Nos	150,000	600,000
B	Ceiling light complete with energy saver 18w	13	Nos	80,000	1,040,000
C	2 way 1 gang light switch as Legrand or equivalent	7	Nos	17,000	119,000
D	1 way 1 gang light switch as Legrand or equivalent	11	Nos	17,000	187,000
E	100mm diameter heavy gauge PVC Pipe	10	Nos	15,000	150,000
F	Allow for earthing of the entire building in accordance with I.E.E. and TANESCO regulations to the whole of electrical installations	1	item	200,000	200,000
G	Earth wire 4sqm	20	m	8000	160,000
H	Earth rod approved copper 16mm not less than 1200mm	2	No	40,000	80,000
Air condition					
J	Smart inveter indoor wall mounted fan evaporating units with its outdoor unit, the indoor unit shall be complete with a wireless remote controller, pipes, brackets and connecting cable, cooling capacity 24000BTU/hr	7	No	900,000	6,300,000
K	PVC conduits pipe sleeve class C size 2 inch in the ceiling/blockwall or duct for Airconditions, including Elbow and other connection	m	24	8000	192,000
To Collection					9,128,000 ✓
COLLECTION					
Page 3/11/1					7,720,000 ✓
Page 3/11/2					9,128,000 ✓
ELEMENT NO. 11 ELECTRICAL INSTALLATIONS					16,858,000 ✓

NOVEMBER 2021



EDWARD G. MADENLA
 PO-RALG
 D: LADE
 21/12/2021
 ENGINEER WORKS
 14

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
ELEMENT NR. 12: ICT INSTALLATION					
A	Switch 24-port with Gigabit Uplinks	0	PC	46,000	—
B	Cat 6 UTP CABLE	1	PC	400,000	1,400,000
C	6U data cabinet wall mounted including all accessories eg. PDU	0	PC	959,000	—
D	Rack Mountable UPS 1100VA	0	PC	410,000	—
E	1m Patch cord	6	PC	3,000	48,000
F	3m Patch cord	6	PC	5,000	30,000
G	Cat 6 patch panel 24 Port	0	PC	380,000	—
H	Cable manager	0	PC	180,000	—
J	Dual face plate	3	PC	27,000	81,000
K	Back Box Single (Steel)	3	PC	3,000	9,000
L	Conduit pipe 1.0"	10	PC	2,000	20,000
Sub Total for ICT Materials					558,000
Add :Labour cost for subtotal 1					129,500
Add :Profit from Sub total 1					50,000
Add :Attendance for sub total 1					50,000
Grand total for Element Nr. 12 ICT Installation carried to Summary Page					787,500

NOVEMBER 2021

3/12/27

PO-RALG

ITEM	DESCRIPTION	PAGE	AMOUNT
	BILL NR.3: MEASURED WORKS ICU BLOCK		
	ELEMENT NO. 01 - SUBSTRUCTURE	3/1/3	27,790,200
	ELEMENT NO. 02 - FRAME	3/2/1.	16,367,700
	ELEMENT NO. 03 - STAIRS	NA	NA
	ELEMENT NO. 04- WALLS	3/4/1.	18,670,000
	ELEMENT NO. 05- DOORS →	3/5/1	15,970,000
⚡	ELEMENT NO. 06 - WINDOWS	3/6/1	9,397,000
	ELEMENT NO. 07 - ROOF	3/7/1	28,522,500
	ELEMENT NO. 08 - FINISHINGS	3/8/3.	34,535,000
	ELEMENT NO. 09 - PAINTING AND DECORATIONS	3/9/1.	10,607,000
	ELEMENT NO.10- PLUMBING	3/10/6.	10,751,000
	ELEMENT NO. 11 ELECTRICAL INSTALLATIONS	3/11/2.	16,858,000
	ELEMENT NR. 12: ICT INSTALLATION	3/12/1.	797,500
	BILL NO.3 - MEASURED WORKS CARRIED GENERAL SUMMARY	T.Shs	188,221,900

NOVEMBER 2021



EDGAR G. MADEMLA
PO-RALG
DISTRICT ENGINEER WORKS
21/12/2021
MFWA PWA

COUNCIL HOSPITALS

INTENSIVE CARE UNIT BUILDING

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	BILL NR.4: PRIME COST AND PROVISIONAL SUM				
	<u>PROVISIONAL SUM</u>				
A	Construction of Septic tank as instructed by Architect		Sum		500,000
B	Soft and Hard landscaping instructed by Architect		Sum		2,000,000.00
C	Construction of Soak pit as instructed by Architect		Sum		500,000
D	Construction of 10 Nr. Manhole as Per drawings		Sum		100,000
E	Allow sum for construction of counter, including worktop and partition at nurse station/laboratory and any as will be instructed by Project Architect		Sum		6,000,000.00
BILL NR.4- PC AND PROVISIONAL SUMS WORK CARRIED TO GENERAL SUMMARY					
					9,100,000

NOVEMBER 2021



PO-RALG

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5.0 POWER OF ATTORNEY

We, the undersigned,

AFRAN CONSTRUCTION COMPANY LTD OF PO BOX 35918 D.S.M. (Name of Company)

A company duly incorporated in Tanzania whose office is at MWENGE AREA by virtue of company's resolution dated

Attached hereto, hereby appoint SAMU SANGHE RUGANRA (Name by donee) with identity/Passport No. 19720231411800004-22 Whose signature appears below.

Signature

With full powers to act for us in our name and for out use to do the following act related to following project CONSTRUCTION OF INTENSIVE UNIT CAMP (I.C.U.) AT

MWENGE PUBLIC HOSPITAL U.S. LG/023/2021-22/HQ/W/116 (Name of project)

- (i) To negotiate contract of works/services ✓
 - (ii) To sign, execute, endorse all document ✓
 - (iii) To open and close accounts: and ✓
 - (iv) To commence any action or actions, suit of suits or defend us in any action ✓
- (Tick whichever is/are applicable).

AND GENERALLY to execute and do things which he/she shall deem necessary or appropriate with the same effect as if we had done, executed or performed it ourselves in relation to the above named project.

In witness hereof we are entitled to sign for and on behalf of

AFRAN CONSTRUCTION COMPANY LTD (Name of company) as we have signed this power of attorney of this 3rd Day of January 2022

This power of Attorney is valid until 3/6/2022 (Date)

Authorized Officer of the Company

Name SHABANI KAPANGA

Designation DIRECTOR

Signature [Signature]

Authorized Officer of the Company

Name HAMIDA MOHAMMED

Designation SECRETARY

Signature [Signature]

This is to certify that HAMIDA MOHAMMED

(Name of donors) have this 03 day of JANUARY 2022 in my presence signed this power of attorney on behalf of the company above named.

BEFORE ME



SEC IX 3

SECTION VI: SPECIFICATIONS

TECHNICAL SPECIFICATIONS

1.0 EXCAVATION AND EARTHWORK 1.1 Nature of excavation

The contractor/Project Engineer must ascertain for him the nature of the material to be excavated and price work accordingly as no allowance will be made beyond the contract sum of any alleged ignorance in this respect.

1.2 Excavations generally

Excavations have been measured from the drawings including the Engineer's site plan showing existing contours. It is the responsibility of the contractor/Project Engineer to check the commencing levels prior to commencing the work as no extra payment will be made in respect of any alleged excavations carried out due to the commencing levels being above that shown upon the drawings without the prior written agreement of the Structural Engineer prior to commencement of excavation.

1.3 Site clearance

The contractor shall clear the construction areas within the site of all bushes, roots, boulders, natural obstructions, rubbish and any other natural or artificial obstructions, which would interfere with construction of buildings, roads, paths and drains.

1.4 Over-site excavation

Excavated material suitable for back-filling around foundations and for making up levels under roads, floors etc., is to be kept separate from soil spoil heaps and to be re-used as directed or spread and levelled on the site at the end of excavation operations when found to be surplus. The amount of any such disposal will be measured on site by the Quantity Surveyor. Vegetable soil is not to be used for back filling around foundations.

1.5 Excavation for foundations and structures

Excavations for foundations and the reinforced concrete structure shall be to the widths, depths and levels to accommodate the structure shown on the drawings. Working space has been allowed for in the measurement of excavation quantities in accordance with the rules of measurement laid down elsewhere in these bills, namely 1.00m from the face of any work which required formwork over 1m deep below the starting level of excavation and 0.30m from the face of any work which requires formwork not exceeding 1m deep below starting level of excavation. Generally formwork has not been measured for plain concrete foundations or column bases and, therefore, excavations for these have been measured, net. Formwork has been measured to reinforced concrete foundation and column bases and all faces of columns and walls and working space excavation has been measured and included accordingly. Adjustments to excavations widths as measured will therefore be made only in the case of the Structural Engineer ordering the addition of formwork to plain concrete foundations etc., or the omission of formwork to reinforced concrete foundations or column bases. Ordinary use of planking and strutting along foundations to prevent earth falls and to save concrete will not be considered as formwork.

1.6 Inspection

When the excavations have been made to the sizes and depths required from the drawings, the Structural Engineer shall be called to the site immediately for an inspection, and upon approval the Contractor shall proceed with the work to prevent rainwater or other surface water draining into the foundations. The excavations are to be left open until any variation in depth has been measured and agreed.

1.7 Excavation below required depths

Should any excavation be made below the levels or lines shown on the drawings or otherwise required by the Structural Engineer, the contractor must fill up the resultant

over-excavation to the proper levels or lines with concrete nominal mix (1:4:8) at his own expense (see "concrete work").

1.8 Filling

The fill shall be clean, selected coarse sand or gravel. It should be taken from borrow pits if the soil on the site is found to contain too much fines and to have too low plasticity limit to be used as fill.

The fill shall be deposited in horizontal layers of max. 200mm Thickness. As soon as possible after the fill is laid out, it should be compacted in min. three passes of a vibratory-roller and/or vibrating- plate compactor. The equipment to be used must be approved by the Engineer.

At each area (control area) of 500m²-compacted fill, three field density tests (e.g. by the sand-replacement method) should be taken randomly.

The Control area to be accepted if all three test results are above 97% of the max.

Density as determined at a homogenous mixing of all three samples by the Standard Proctor Method. Otherwise, repeat the test, each time with three new samples until the above requirement is met or re-compact and test again.

1.9 Return, fill in and ram

Return, fill in and ram suitable filling material as described above around foundations and other concrete structure in layers not exceeding 150mm thick and carefully ram and consolidate with power rammer. No filling in shall be executed until concrete foundations etc., have been inspected and approved by the Structural Engineer.

Regardless of the means of back filling and compaction adopted, the contractor is responsible not only for the standard of the work but also for any possible damage of the permanent work or adjacent structure.

1.10 Levelling

No item is measured for levelling and consolidating ground and rates for excavation must include for levelling and preparing the ground for concrete or other works including ramming or rolling.

1.11 Soil sterilisation

Anti-termite treatment is to be carried out by an approved specialist firm who will be required, upon completion of the soil sterilisation, to furnish a written guarantee qualifying the following: -

That the chemicals applied comply with the requirements specified herein for chemical concentration and rates of application.

That the treatment will remain effective against termite infestation for a period of five years.

The free re-treatment by the firm of any areas showing signs of infestation before the expiry of the five year period.

The chemicals used shall be one of the following: -

- i) Gamalin 0.5% applied in oil solution or water emulsion.
- ii) Benzene hexachloride, 0.8% of gamma isomer applied in oil solution or water emulsion.
- iii) Chlordane 1.0% applied in solution or water emulsion.
- iv) Dieldrin 0.5% applied in oil solution or water emulsion.

- v) Lindane; 0.8% in oil solution or water emulsion
- vi) Pentachlorophenol; 5% in oil solution. vii)

Trichlorobenzene; 1 part to 3 parts oil.

Some of the chemicals listed above are toxic to animal and plant life and must therefore, be applied only with caution by an experienced person. Where individual water supply systems are proposed precautions must be taken to prevent in filtering and endangering the water supply. Treatment shall not be made when a soil of fill is excessively wet or immediately after heavy rain.

Precautions must also be taken to prevent disturbance of the treatment by animals or human contact with the treated soil. The treated area is to be covered as quickly as possible after treatment.

The rate of application is to be 5 litres per square metre and the areas measured include those under floor and round wall and column foundations.

The contractor shall notify the structural engineer in sufficient time before the filling of foundation trenches and laying of concrete floor bed in order that the Architect/Engineer may nominate a specialist firm to execute the soil sterilisation.

Any additional costs caused by the contractor not rendering sufficient prior notice to the Architect/Engineer will be borne entirely by the Contractor.

1.12 Disposal of surplus excavated material

Surplus excavated material will be carted away from the vicinity of the walls and deposited, spread and levelled on areas to be allocated by the Structural Engineer, reasonably adjacent to the site.

1.13 Disposal of water

The contractor shall keep the excavations free from standing water and silt (or excavated material softened by water) and he shall include for the cost of pumping, construction of temporary drains; soak-way pits, etc., as deemed necessary to achieve this. An item has been included for this in the Bills in each relevant section. The cost of pumping to dispose of any spring or running water has been covered by a Provisional Sum. If spring or running water is encountered the cost of any pumping ordered by the Structural Engineer will be paid for in accordance with the Dayworks schedule.

1.14 Planking and strutting

Sides of all excavations must be supported in order to prevent falls from or collapse of the earth face. The "Planking and Strutting" is deemed to include any method or methods, which the contractor elects to adopt to uphold, protect and maintain the sides of excavations. The contractor will be responsible for any consequences of his failure in this respect including clearing away fallen materials and any extra concrete or other works including formwork ordered by the Structural Engineer due to such failure. An item has been included in these Bills in each relevant section.

1.15 Hardcore

Hardcore shall be hard crushed stone to pass a 100mm ring in all directions. No sand, quarry dust or fine material will be permitted. All hardcore beds shall be topped with a layer of fine stone or aggregates minimum size 12mm to fill the voids on the surface to receive concrete beds. Rates for hardcore shall include for levelling or finishing or laying to falls and consolidating by rolling as described for "Filling" above.

2.0 CONCRETE WORK 2.1 *Materials and workmanship generally*

The recommendations of the recent British Standard Codes of Practice BS 8110 for the Structural use of reinforced concrete in buildings shall be deemed to be incorporated in these preamble clauses unless otherwise specifically stated.

2.2 *Materials generally*

All materials to be used in the works shall conform as to quality and description as specified hereunder and shall be equal to approved samples. In particular no materials shall be used until approved samples shall be supplied to the Consulting Engineer for approval at least one week before ordering in bulk and delivery to the site. Any material delivered to the site, which has not been previously approved by the Structural Engineer shall be the Contractor's liability. All materials shall be transported, handled and stored on site so as to preclude damage deterioration or contamination. All condemned materials are to be removed from the site within 24 hours.

2.3 *Cement*

The cement, unless otherwise specified on the drawings shall be Ordinary Portland Cement of approved manufacture, delivered in the manufacturer's bags and shall comply in all respects with the requirements of the latest British Standard 12. The consignments of cement shall be delivered in sealed bags and shall be stored on the site so as to be used in the order in which they are delivered. The structural engineer shall have the right to take samples for testing in accordance with BS. 12 and the contractor are to obtain current certificates of test from the manufacturer prior to bulk deliveries. Under no circumstances is High Alumina Cement to be used.

Rapid hardening cement may be used in lieu of ordinary Portland cement only with the prior approval of the Architect/Engineer or Engineer, provided that all conditions applying to its use are strictly observed. Any additional expenses in connection with the use of such cement shall be borne by the Contractor.

2.4 *Aggregate generally*

All aggregate shall be from approved reputable sources and shall be strong, hard, durable or limited porosity, free from dust, soft materials, earth or other extraneous matter, and washed and / or screened by the Contractor if so required by the Structural Engineer. Samples shall be provided as often as called upon by the Structural Engineer for testing in accordance with BS. 882. Normal aggregates will have particle densities of greater than 2000 Kg / m³ but not exceeding 3,000 Kg/ m³. Only approved materials shall be used.

Graded samples of all types of aggregate shall, after approval, be kept on site behind glass for visual checking of subsequent deliveries for grading, shape and where applicable, colour. Aggregate shall be stored on site on paved areas with divisions between each type of aggregate, and shall be used in the order in which they are received on site. No aggregate shall be stored directly on the ground.

2.5 *Fine Aggregate*

The Contractor shall ensure that the grading of fine aggregate shall be such that not more than 10% by weight shall exceed 5mm in size and not more than 10% by weight shall pass a sieve BS. No. 100. Between these limits the grading shall conform to the grading for either zone, 1, 2 or 3 (B.S.882).

2.6 *Coarse aggregate*

Coarse aggregate shall be clean, well-graded crushed granite stone or other equal and approved stone from an approved quarry and washed if required by the Structural

Engineer. The pieces shall be angular or rounded in shape and shall have granular or crystalline or smooth (but not glassy) non-powdery surface. Flakey and laminated pieces, mica and shale shall only be present in such quantities as not to affect adversely the strength and durability of the concrete.

The four nominal aggregate sizes shall be 40mm (1½"); 20mm (¾"); 10mm (⅜"); 6mm (¼"); and the grading when analysed as described in BS. 812 shall be within the limits given in BS. 882. Structural Engineer will specify sizes of aggregates to be used in specific areas. For most work 20 mm maximum size aggregates will be used. The nominal maximum size of coarse aggregates should be not greater than ¼ of the minimum thickness of concrete section or element.

2.7 *Water*

Water used for mixing of concrete, washing out of shuttering and similar purpose shall be clean, fresh and free from organic impurities in amounts likely to impair the quality of the concrete and should comply to requirements of BS 5328 and BS 3148:1980 "Methods of test for water for making concrete".

2.8 *Admixtures*

Structural Engineer will approve all concrete admixtures after submission of specifications or proprietary brands and relevant trial mix verification at site by Contractor. Admixtures to comply with BS 5075 "Concrete Admixtures".

2.9 *Steel reinforcement*

Steel for reinforced concrete shall comply with the following specification:-

- i) Mild steel rod reinforcement shall comply with BS. 4449.
- ii) High tensile steel reinforcement shall be either cold worked deformed steel bars of circular octagonal section complying with BS. 4461 or hot rolled deformed high tensile bars having a guaranteed minimum yield stress of 460 N/mm² and other physical qualities in accordance with BS. 4449
- iii) Welded steel fabric reinforcement shall comply with BS. 4483 iv) BS. 8110, the structural use of reinforced concrete in buildings.

All steel reinforcement shall be supplied by an approved manufacturer; and the contractor may be required to obtain a manufacturer's test certificate in respect of steel reinforcement supplied. In the absence of such a test certificate, the contractor may be required to submit samples to be tested at the contractor's expense in such manner as to comply with BS 8110 requirements.

The steel shall be stored so that it is kept clean and reasonably free from rust. The placing of all reinforcement shall be checked by the Engineer and in no circumstances is concrete to be deposited around any steel that has not been passed. At least twenty-four hours notice shall be given to the Engineer that reinforcement will be ready for inspection.

2.10 *Bending and fixing of reinforcement*

All bending, cutting and fixing to be in compliance with the British Standard code of Practice, BS 8110 and BS 4466 Bending schedules are incorporated in the contract drawings.

The number, size, form and position of all reinforcement shall unless otherwise directed or permitted by the Architect/Engineer, be strictly in accordance with the

drawings. Bars shall be of the required lengths, and lapping, except where indicated on the drawings, is not permitted unless approved by the Engineer.

Overall dimensions shall not be exceeded and shall not be less than 6mm below the required dimensions. The sizes of links and the like shall be within tolerance of 3mm under or over the specified dimensions. Any tolerance in the total length of the bar as cut shall be taken up in the end hooks or other approved portions of the bar. The internal radius of the bends at corners of links and the like shall equal half the diameter of the bar embraced by the link.

Laps in bars of random lengths shall be staggered in such a way that no more than 1/3 of bars having same number are to be lapped in the same section.

The steel reinforcement shall be assembled and fixed in the form of a rigid cage. To prevent displacement before or during concreting the bars shall be secured to each other with approved wire. Concrete distance blocks shall, unless otherwise directed, be used between the reinforcement and the bottom and sides of the forms to ensure correct concrete cover to the bars, as specified on the drawings. The specified cover shall be provided and maintained within the specified tolerance.

The minimum clear distance between adjacent bars shall be 25mm horizontally and 25mm vertically. Spacer bars shall be inserted at such intervals that the bars do not perceptibly sag.

Great care must be taken to ensure the correct positioning of beam and column starter bars and to secure projecting bars against displacement both during and after concreting.

At the time of fixing and when concrete is being placed, all reinforcement shall be free from oil, paint, grease excessive dust and scale or any other coating, which would destroy its bond with the concrete.

2.11 Formwork to produce a fair face board finish (wrought formwork)

Formwork described as wrought shall be constructed of or lined with 100mm wide planed boards well cramped together or plywood to leave a fair smooth finish in the exposed concrete face when the shuttering is removed.

2.12 Construction and Movement joints

The positioning, type and frequency of construction joints are to conform to requirement of BS 8110 and be approved by Engineer. Methods of forming movement joints to follow drawings and the requirements of BS 8110.

2.13 Concrete grades

Only designed concrete mixes complying with BS 5328 shall be used. Concrete must comply with the requirements set out in the following table according to the grade (This is for guidance only)

MIX	OF COARSE AGGREGAT E	CEMENT RATIO BY WEIGHT	CRUSHING STRENGTH OF WORKS TEST CUBES (N/mm ²)

GRADE	NOMINAL	MAX.SIZE	MAX WATER	7 MINIMUM DAYS	28 MINIMUM DAYS
30	1:1:2	20mm	0.50	20	30
25	1:1½:3	20mm	0.55	17	25.5
20	1:2:4	20mm	0.60	14	20
15	1:3:6	25mm	0.60	8	14
10	1:4:8	40mm	0.60	-	10

2.14 Concrete Production, Supervision and Tests

Concrete should be produced in accordance with BS 5328 which requires tests to be made on constituent materials in accordance with relevant British Standards and control tests be made on concrete to ensure compliance with specified requirement. Engineer will in addition approve procedures for placing, compacting, curing and working in hot weather.

Concrete should meet appropriate requirements specified in BS 5328 for a)

Characteristic compressive strength

- b) Specified mix proportions
- c) Maximum and minimum cement content
- d) Maximum free water/cement ratio
- e) Workability
- f) Air content of concrete
- g) Temperature of fresh concrete
- h) Density of fully compacted concrete.

2.15 Preliminary cube tests

The contractor shall specify the sources from which the aggregate will be obtained and shall deliver at his own cost sufficient materials enable preliminary cube tests to be carried out and approved by the Engineer. The Contractor will be responsible for submitting his proposals for the concrete mix proportions together with aggregate grading curves to the Architect/Engineer for approval and for the payment of the fees of an approved Testing Authority in carrying out the crushing tests. The strength of the preliminary cubes must be a minimum of 33% above those in the above table, which is the minimum works strength.

The approval of any mix by the Engineer will not relieve the contractor of the responsibility for ensuring that all concrete used in the works obtain the minimum works strength shown above.

In proportioning the concrete the quantity of cement shall be determined by weight and the quantities of fine and coarse aggregate by either volume or weight, due allowance being made for the moisture content of the aggregate.

Only sufficient water shall be added to the cement and aggregate during mixing to produce a concrete having sufficient workability to enable it to be well consolidated, to be worked into the corners of the shuttering and around the reinforcement, to give the specified surface finish and to have the specified strength. When a suitable amount of water has been determined the resulting consistency shall be maintained throughout the corresponding parts of the work and the slump test or compaction factor test shall be carried out from time to time to ensure the maintenance of this consistency. In no case should the slump be more than 65mm as determined by the standard slump test nor should the compaction factor be more than 0.87 as determined by the standard compaction factor test as described in BS. 1881.

Should the Contractor wish to use patent, plasticising compounds or other admixes, those shall be approved by the Engineer and be used in accordance with the manufacturer's publications.

2.16 Work cube tests

Work cube tests shall be made throughout the contract. Each cube shall be inscribed with the date of manufacture and identification mark. A record shall be kept for each batch of cubes showing the position in the works which the concrete represents, the date of manufacture, the mixture and slump of the concrete, particulars of the cement and aggregate used, a statement of whether or not the cubes were vibrated and other information relating to the subsequent history of the cubes.

The cube shall be made, cured and tested in accordance with the requirements of BS. 1881 when directed by the Engineer and in his presence or that of the Approved Testing Authority. A sample of concrete shall be taken at random on eight separate occasions during each of the first 5 days of using that mix.

6

/10 Thereafter at least one sample shall be taken on each day any concrete of that particular mix is used. From each sample four cubes shall be made two for testing at 7 days and two for testing at 28 days. The work cube results shall be examined both individually and in consecutive (but not overlapping) sets of four, for which the average and the range of each set are calculated.

The mix proportions shall be modified to increase the strength if, in the first and consecutive (but not overlapping) sets, any of the following conditions are not satisfied:-

- i) Not more than 2 individual results of the 40-cube test should fall below the specified work cube strength.
- ii) No value of the range in any set should exceed 4 times the designed standard deviation.
- iii) Not more than one set should have an average, which is less than the specified strength plus $1\frac{1}{3}$ times the designed standard deviations.
- iv) No value of the average for any set should be less than the specified strength plus the designed standard deviation.

After 10 consecutive sets of results have been obtained the overall average and the standard deviation of the 40 results shall be calculated and any appropriate modifications made. Subsequently, if any of the foregoing conditions are not satisfied, the overall average and the standard deviation of the previous consecutive 40 results, including the non-complying sets, should be calculated and the appropriate steps taken if the overall average strength twice the standard deviation is less than the specified work cube strength.

2.17 Quality control requirements

2.17.1 Supervision

A competent person shall be employed whose duty shall be to supervise all stages in the preparation and placing of the concrete. He shall supervise all tests on the materials and cubes and the maintenance and calibration of mixing and measuring plant. This person shall also be responsible for keeping an accurate record of the dates on which concrete is poured and where. Where the Engineer is not satisfied with the performance of concrete supervisor he shall recommend to the Architect/Engineer for removal from site.

2.17.2 Batching and mixing plant

The quantities of cement and of fine and coarse aggregate shall be determined by weight. The amount of water added shall be measured, allowance being made for the water content of the aggregate. The accuracy of weighing and measuring equipment shall be 2.5%. Measuring equipment for water shall be maintained in a clean serviceable condition.

2.18 Workmanship

2.18.1 Placing of reinforcement

Reinforcement shall be accurately placed and maintained in the position described on the drawings or elsewhere to the entire satisfaction of the Engineer. Bars intended to be in contact at passing points shall be securely wired together with 16 gauge annealed soft iron tying wire.

Binders and the like shall tightly embrace the bars and any slackness or misplacement of bars shall be rectified before the Engineer is called for inspection. Spacers of approved design shall be used for ensuring the correct positioning of the bars and diagonal wiring shall be provided to ensure rigidity of all assembled units of reinforcement. The vertical distance required between successive layers of bars in beams or similar members shall be maintained by the provision of mild steel spacer bars inserted at such intervals that the main bars do not perceptibly sag between spacers. The rates for reinforcement must include for all requisite wiring, spacers and precast concrete blocks to maintain the required spacing and cover. All bars are to be bent in accordance with BS. 4466, 1969. Cover of concrete to the reinforcement shall be, unless shown otherwise:-

Columns	-	40mm minimum to main bars	Base	-
		50mm minimum to main bars		
Beams	-	25mm minimum to main bars		

Slab	-	15mm minimum to main bars
Wall	-	25mm minimum to main bars
Raft slab	-	100mm minimum to main bars

Splices to future work shall be covered in a manner approved by the Engineer to prevent rusting and deterioration. Before any concreting is carried out the approval of the Engineer as to the correctness of the fixed reinforcement shall be obtained but such approval shall not remove the responsibility for the correctness of the placing from the contractor. During concreting a competent steel fixer shall be in attendance on the concrete gang to make minor adjustments to the position of bars should they become displaced.

2.18.2 Formwork generally

Formwork design and construction should take into account of safety and surface finish required and to conform to requirements of BS 8110 and BS 5975. Dimensional deviations of insitu concrete shall be to limitations set in BS 5606

All formwork and moulds shall be rigidly constructed to accurate shape and dimensions as described on the drawings and to requirement of BS 5975. Timber shall be well seasoned, free from loose knots and be of a kind and thickness that will avoid deflection and warping, remaining true to line and level. Faces in contact with the concrete shall be free from adhering grout, projecting nails, splits or other defects and shall be coated with an approved mould oil so as to prevent grout adhering to them, care being taken to prevent such coatings from any contact with the reinforcement.

Formwork shall be braced and strutted to prevent deformation under the weight and pressure of the wet concrete, construction loads, winds and other forces. The bottoms of beam boxes shall be erected with an upward camber so as to prevent downward deflection. Maximum tolerances, which will be permitted in the finished concrete work, are to BS 5606 as follows:-

Dimensions less than 3m	$\pm 3\text{mm}$
Dimensions between 3m & 15m	$\pm 6\text{mm}$
Dimensions over 15m	$\pm 10\text{mm}$

Joints in the moulds of formwork shall be carefully made so as to prevent leakage of cement grout and particular care shall be exercised to this respect for moulds in which it is intended to place vibrated concrete. Openings in the formwork for inspection of the inside and for the escape of water used for washing out accumulated debris shall be formed in such a manner that they can effectively be closed before placing the concrete.

Formwork connections and joints shall be constructed so as to permit easy removal of the formwork, but shall be so secured as to retain correct shape under pressure exerted by the wet concrete during placing, vibration, setting and hardening. If any wire ties passing through the concrete or bolts are used, measures shall be taken to prevent rust, stains on the finished work and any holes left by the removal of such ties shall be made good. Formwork shall be provided for top faces of sloping work and anchored to prevent floatation, but this shall apply only where the slope exceeds 15 degrees. The formwork for beams and slabs shall be erected so that the sides of the beams and soffits of the slabs can be removed without disturbing the beam bottoms. Props for an upper storey shall be placed directly over these in the storey immediately below and the lowest prop shall bear upon work sufficiently strong to carry this load.

If formwork of columns; walls and other deep sections is erected to the full heights, one side shall be left open and shall be built up in sections as placing of the concrete proceeds. Before concreting, bolts and fixings shall be in position. Cores and other devices used for the forming of openings, holes, pockets, chases, recesses and other cavities shall be fixed to the formwork and no subsequent holes shall be cut in any concrete without the Architect/Engineer's approval

2.18.3 Mixing of Concrete

All concrete shall be mixed in batch mixing machines. Hand mixing shall not be permitted. All mixing machines shall be of the fixed drum types and not smaller in size than 0.40/0.28 CM drum mixers will not be permitted. The mixer shall be of the type equipped with an accurate measuring device designed so that no unauthorised person can tamper with the valve or vary the quantity of water delivered once this has been approved and set. The mixing procedure to be adopted by the Contractor shall be approved by the Architect/Engineer.

Mixing of each shall be approved by the Engineer. Mixing of each batch shall continue until the concrete is uniform in colour and, in any case, for not less than two minutes after all the materials and the water is used in the drum. The entire contents of the drum

shall be discharged before the materials for the succeeding batch are fed into the drum. Upon completion of the day's mixing, the drum shall be thoroughly cleaned free of adhering concrete.

2.18.4 Distribution of Concrete

The concrete shall be distributed from the mixer to the position required by approved means, which do not cause separations or otherwise impair the quality of the concrete. All equipment shall be cleaned before commencing mixing and distribution and be kept free from set concrete. All concrete must be in position and consolidated before the initial set is commenced and the contractor shall ascertain the initial setting time for the brand of cement being used and ensure that his means of distribution are such that it is impossible for concrete to have set prior to placing.

Distribution by means of mortar pane generally will be permitted, but for important large structures such as slabs, large beds and elsewhere instructed by the Engineer the minimum requirements shall be wheelbarrows, ramps and runways over the reinforcement.

2.18.5 Placing of Concrete

Before placing of concrete commences, the formwork shall be examined and any accumulated water and rubbish lying therein shall be removed. The concrete shall be placed as near to its permanent position as is practicable and shall not be worked along the formwork to that position. It shall not be dropped from a height not handled in a manner likely to cause separation of the aggregate or loss of the cement matrix. In columns and other similar members the bottom shall be first filled to a depth of between 150mm and 200mm with a cement mortar consisting of sand, cement and water with the sand and cement in the same proportion as that specified for the general mix in that member. The mortar shall have a consistency such that it will

work up the formwork and fill in spaces, which may occur due to close spacing of reinforcement in the splice. This mortar must be placed immediately in advance of the concrete and shall not be allowed to attain its initial set before placing the main concrete for the member. Each layer of concrete, while being placed, shall be consolidated by the approved methods of ramming/ tamping or mechanical vibration so as to form a dense homogeneous material free from honeycombing water and air holes or other blemishes. Concrete shall be placed continuously until completion of the part of the work between the specified construction joints. Approved working joints shall be made whenever stopping of concrete placing occurs. In general, concrete shall be placed in a single operation to the full thickness and depth of slabs, beams and similar members and, in any case, shall be placed in horizontal layers not exceeding 750mm deep in walls, columns and other similar members:-

2.18.6 Vibration

Mechanical vibrators or hand tamping must be used in placing all reinforced concrete work unless the Engineer has approved specially designed mixes and preliminary work cube test results have been obtained without their use. Rates for all reinforced concrete work include for this. Where mechanical vibration is required the contractor shall allow for using two vibrators at any one time.

2.18.7 Working joints

Working joints shall be of an approved shape and placed at right angles to the axis of the member. The contractor shall submit his proposals for the design and position of all joints on a drawing to the Architect/Engineer for his approval well before construction is commenced. The position of day-to-day working joints may be determined so as to meet the requirements of the contractor's concreting programme.

Wherever new concrete is to be placed against concrete that has hardened, the face of the old concrete shall be cut back not less than 20mm and all-loose particles removed. The face shall then be wire brushed and thoroughly cleaned with water and then coated with a neat cement grout immediately before placing the concrete shall be well rammed and compacted against the prepared face before the neat cement grout sets.

2.18.8 Protection of Concrete

Newly placed concrete shall be protected by approved means from rains, sun and dry winds, and exposed faces shall be kept moist with polythene sheets or hessian coverings or other approved means for at least 7 days. Under no circumstances shall concrete be worked upon until it has reached a cube strength of 140kg per square centimetre. Immature concrete shall be protected from damage by falling debris excessive loading vibrations, running or standing water, abrasives or other influences likely to impair the quality or strength of the finished work

2.18.9 Concrete in Excavation.

The length and widths of the excavation shall be as necessary for the proper construction of work below ground and in accordance with the Preambles contained in the section 'Excavation and Earthwork'. Blinding concrete has been measured for the net width required for concrete structure and foundations below ground level. Blinding has not been measured to the extra width, if any required for working space.

The depths shall be decided by the Architect/Engineer where these are not given on the drawings. Any obstructions or unusual solids encountered during the excavation shall be reported to the Architect/Engineer and dealt with as then instructed.

2.18.10 Removal of formwork.

The period elapsing between placing the concrete and removing the formwork shall be sufficient to allow the concrete to mature to the extent of being able to maintain its own weight and any constructional and structural loads imposed without damage. The Architect/Engineer's approval for the removal of the formwork shall be as tabulated below:

Position of Formwork	Minimum striking Time
Vertical sides of wall, columns, beams, etc	2 days
Soffits of beams & slabs (props left)	7 days
Slab and props	14 days
Bottom boards of piles (intermediate support left in)	12 days
Soffits of beams under 6m span	16 days
Additional: Period for each 0.6m span in excess of 6m span with a maximum of 28 days	1 day

The formwork shall be removed in all cases by gradual easing without jarring and the process shall be such that the sharp edges of the concrete are not chipped and spilled away. If the imposition of a load is anticipated, props shall be provided in an approved manner after removal of the formwork and before the imposition of the loads.

2.18.11 Surface finishes

Upon removal of the formwork any honeycombing or damaged surfaces or other imperfections shall be reported to the Architect/Engineer. No surfaces shall be repaired or otherwise treated until an inspection has been carried out by the Architect/Engineer and his instructions or approval to remedial work (if any) have been given or obtained.

Concrete surfaces, which are to be plastered or rendered, are to be hacked or roughened by an approved means to form a key.
Sawn formwork is measured for all surfaces requiring support and subsequently concealed or plastered.

2.19. Precast Concrete

Where precast concrete members are specified, these shall be constructed in moulds of approved design and samples from the moulds shall be approved before quality production of the member is commenced to requirement of BS 8110. Large precast

members shall be lifted only at points, which will not damage the member, and if necessary temporary bracing of timber shall be used to case the member until it is in position. Small lintels and other small members may be cast in-situ at no extra cost at the contractor's option. Allowance must in all cases be made for any extra reinforcement to counteract temporary stresses whilst handling, transporting and hoisting precast concrete members. Moulds for precast units described as finished fair on exposed surfaces shall be lined with plywood or hardboard to leave a fair finish on the exposed concrete face when the mould is removed.

The concrete shall be of the grade specified on the drawings but with maximum aggregate size 12mm and shall be thoroughly vibrated in the moulds and shall not be removed until seven days after placing the concrete.

Care must be taken that no concrete is allowed to become prematurely dry and the fresh concrete must be carefully protected from the rain, sun and wind by means of 'Sisal-kraft' paper, well-wetted sacking, wet sand or other approved means. This protective layer and the concrete itself must be kept continuously wet for at least seven days after the concrete has been placed.

Prices for precast concrete shall include for all moulds, reinforcement as specified, hoisting and fixing in the position required. bedding and pointing as described and temporary props and other necessary supports.

2.20 Sub-contractors work Incorporated in the Structure

It shall be the contractor's responsibility to co-ordinate sub-contractor's and others for incorporating any electrical conduit, plumbing fixtures and pipes, bolt holes, etc., in the concrete members as required and shown on the drawings. The contractor shall submit details of cable and pipe runs to the Architect/Engineer before the work is put in hand and shall have the Architect/Engineer's approval of the layout. No holes or chases shall be cut on concrete without the approval of the Architect/Engineer.

2.21 General

No holes or chases are to be cut in any part of the reinforced concrete construction without first consulting the Architect/Engineer. No part of the reinforcement shall be used for conduiting electrical current. Notice must be taken of any appearing on the drawing and not mentioned in these preambles.

2.22 Movements and Separation Joints

Movement joints shall comprise of Bitumen impregnated softboard or similar approved.

Joints topping are to be 'Plastic' or similar approved hot poured rubber bitumen compound. Pointing to vertical joints is to be 'Plastic joint' or similar approved bituminous putty applied with a gun. Joints are to be at least 12mm deep and the gap is to be formed either by raking cut (in the case of expanded polystyrene) or by temporary wooden battens of the required width and 12mm deep.

Rates for the expansion or separation joint shall include all necessary labour and the materials described above, temporary supports and cutting where required to line with concrete surfaces finished to falls. Formwork has been measured as a separate item to one side only of expansion joints.

2.23 Mortise and Pockets

Mortise or pockets for holding down bolts or dowels shall be formed in concrete to the size and shapes shown on the drawings. Mortises shall be formed by the use of expanded polystyrene blocks of the required shapes and sizes carefully and accurately placed and maintained in position whilst the concrete is poured.

Rates for mortises shall include for all necessary templates and raking out and the complete removal of the polystyrene when the concrete has set. No deduction from

concrete quantities have been made for any mortise, pocket or any other void in the concrete of 0.05 cubic metre or less and the Contractor may take this into account when pricing. Grouting up has been measured separately.

3.0 WALLING 3.1 Water

Water shall be as previously specified in 'concrete work.'

3.2 Cement

Cement shall be as previously specified in 'concrete work'.

3.3. Fine Aggregate

Fine aggregate shall be as previously specified in 'concrete work.'

3.4 Coarse Aggregate

Coarse aggregate shall be as previously specified in 'concrete work' and shall comprise aggregate of 6, 10 and 20mm gradings in equal proportions.

3.5 Lime

Hydrate limes for cement/lime mortars shall comply with B.S.890 semi-hydraulic class 'B' calcium limes

3.6 Bricks and Clay blocks

Clay bricks and blocks, solid and hollow, shall comply with B.S.3921: 1974. The Architect/Engineer shall approve the manufacturer and/or supplier of clay bricks and clay blocks

The vertical joints of one course should not be less than a quarter-brick from the vertical joints of the courses above and below.

Where strength is critical, bricks with one frog only should be laid with the frog upwards so that it is automatically flushed with mortar.

3.7 Joints

The joints of brickwork may be finished by one of the following methods.

- i) With a flush joint as the work proceeds this joint being formed of the actual mortar used in bedding the bricks.
- ii) Struck or recessed joint formed in the mortar as the work proceeds when it has gone some way towards setting. Recessed pointing must be even and not vary in depth where not recommended otherwise the recess shall be 6mm deep.

iii) Joints raked out while mortar is soft and cleaned down and pointed at completion. When the joints are raked out and pointed later the pointing mortar should be of a composition similar to that of the bedding mortar.

iv) Joints raked out and left as key for plaster or roughcast.

3.8 Concrete Blocks

Solid and hollow concrete blocks for walls comply with BS. 6033/2028 type 'A' except that the recommended mix shall be 1:3:6 cement; fine and coarse aggregate respectively by volume and are to have sharp arises. Blocks are to be manufactured on site in approved block making machines and shall be solid or two cavity hollow types as specified on the drawings. No damaged blocks shall be used in walling and half or other part blocks required to maintain bond shall be cut true and even.

The concrete is to be placed into the moulds in thin layers and shall be properly tamped or vibrated to secure complete consolidation without voids or flaws produce smooth surfaces and sharp straight corners.

Blocks shall be cast on loose pellets and after removal from the moulds shall be carefully stored under for at least 24 hours before the pellets are removed. The blocks shall thereafter be stored under cover for a further seven days protected from the sun and drying of the blocks may commence on the ninth day after manufacture and no blocks may be used within 14 days of their production.

The compressive strength of the type 'A' concrete blocks shall be not less than: □

Average of 13 blocks 50 kg. per square centimetre (700 lbs. per square inch)

□ Lowest individual blocks 40kg. per square centimetre (580 IBS per square inch)

Concrete louvre blocks shall be of an approved type and manufacture. They shall be with inclined faces and have overall size 450 x 150 x 150mm (excluding lip protruding outside the bedding face).

3.9 Fair face work

Walls described as finished with a fair face shall be constructed with blocks selected for their uniformity of size and with a smooth exposed face with no chips, blemished, pinholes or cracks. Walling shall be pointed with a neat flush joint as work proceeds and on completion shall be brushed down and left thoroughly clean.

3.10 Mortar

The mortar used for walling shall be composed of one part of cement to two parts of hydrated lime to nine parts of sand (1:1:6) measured in gauge boxes and thoroughly mixed dry and preferably with an approved mixing platform with water added afterwards until all parts are completely incorporated and brought to a proper consistency and used within the hour. No partially or wholly set mortar will be allowed to be re-used or re-mixed.

3.11 Workmanship

All blocks and stone to be wetted before laying out the top of walling where left off, shall be well wetted before recommencing building, walls to be kept wet three days after building.

All walling to be built true, plumb and level with all perpend vertical and in line and work shall not rise more than 900mm above the adjoining work and all such risings are to be properly raked back.

3.12 Damp proof course

Damp proof course between foundations walls and the oversite concrete slab shall be hessian based bitumen strip to BS. 743 type 5A the same width as the block walls. The damp proof course shall be bedded in cement mortar (1:4) with 150mm-end laps and full width at passings and angles. Damp proof courses are required on all external and internal foundation walls.

4.0 ASPHALT WORK 4.1 Generally

The asphalt work shall be executed complete by an approved specialist subcontractor.

4.2 Asphalt for tanking

Asphalt for tanking and damp proofing shall be mastic asphalt and shall comply in all respects with BS. 1097 and shall be applied in three coats with 150mm laps on horizontal work and 75mm laps on vertical with a two-coat asphalt fillet at all internal angles.

In laying asphalt in basements the contractor must take the following precautions and his prices must include for these:-

- i) Immediately upon completion the horizontal asphalt must be protected by covering it with a fine concrete screed of not less than 50mm thickness, in order to avoid damage by dumping of steel reinforcement rods, spillage of oil etc.
- ii) The vertical asphalt, the angle fillets and the offsets (if any) must be protected as quickly as possible by the erection of the skin walls or of main structural walls as the case may be.
- iii) In particular piercing the asphalt membrane by driving nails, puncturing the asphalt membrane by reinforcement rods or other materials, using asphalt membrane as a base for strutting and dropping petrol, oil or other solvents particularly from the contractor's plants, upon the asphalt or upon the surrounding area, must be avoided. It is essential that pumping operations be maintained on wet site until protective loading coats and protective walls are complete and fully set.

4.3 Asphalt for paving

Asphalt for paving, roads and footways shall be mastic asphalt and shall comply in all respects with BS. 1446 (natural rock aggregate) and BS. 1447 (limestone aggregate) shall be applied in strict accordance with the Architect/Engineer's (or his representative) specifications and instructions.

4.4.Asphalt for roofing

Asphalt for roofing shall be mastic asphalt and shall comply in all respects with BS. 988 (mastic asphalt for roofing-limestone aggregate) or BS. 1162 (mastic asphalt for roofing-natural rock asphalt aggregate) and shall be applied in two coats, to a final thickness of 20mm. The composition of asphalt shall be in accordance with BS. 988 Table III columns. Where roofing is to be used by vehicular traffic for example, car park etc. the asphalt to be used will be as for paving. The laying of the roofing shall be in conformity in with C.P.144 (roof coverings part 2, mastic asphalt) and the covering shall be laid on an insulating membrane of black sheathing to BS. 747 type 4A.

The rates inserted in the bills of quantities for roofing must allow for the cost of the sheathing felt, as it is not measured separately.

4.5Preparation of surfaces

All surfaces to receive asphalt are to be dry and rough, groove or otherwise prepared and finished to the requirements and to the entire satisfaction of the asphalt sub-contractor and the Architect/Engineer.

4.6Melting asphalt on site

Asphalt blocks shall be broken into pieces of convenient size and carefully melted in cauldron or mechanically agitated mixers, on the site at a temperature not exceeding 215 C or the Molten material may be delivered to the site in mechanically agitated mixers.

4.7Dusting of buckets

Buckets used for carrying molten asphalt shall be dusted with a fine inert dust. On no account shall ashes or oil be used for this purpose

4.8 Laying of asphalt

Asphalt shall be laid in bays generally not exceeding 2 metres wide and succeeding coats shall be laid breaking joint. Junctions between bays and fillets shall be properly married, the laid asphalt being heated by the application of the hot material, the whole being worked so that the joints are neatly made. Air pockets and stains on the asphalt will not be permitted and the finished asphalt work shall be not ring hollow over any parts of its surfaces.

Joints in all asphalt work shall be made and complete fusion obtained to make them watertight. Fillets shall be run at all internal angles and at least in two operation

5.0 ROOFING 5.1 Vermiculite lightweight screed

Vermiculite lightweight screed shall be mixed in the proportions of 6 parts by volume of vermiculite Grade 5 to 1 part of Ordinary Portland Cement with approximately 2 parts of clean potable water to give a density of 700 kg. per m³.

Vermiculite screed is to be finished to receive a topping coat of water proofed cement and sand (1:4).

5.2 Roof waterproofing

The waterproofing shall be carried out with cement and sand (1:4) waterproofed with 'Puddle' or other equal and approved waterproofing compound in strict accordance with the manufacturer's printed instructions.

5.3 Bitumen felt roofing

5.3.1 Generally

Bitumen felt roofing shall be executed by a specialist subcontractor to approved by the Architect/Engineer.

5.3.2 Materials

Bitumen felt roofing (or built up roofing) shall be in accordance with BS. 747 (roofing felts). The roofing shall be composed of three layers of single roofing felt of specified quality; weight and make.

5.3.3. Fixing

Bitumen felt roofing shall be carried in accordance with the requirements of CP 144 part 1:1968, (built up bitumen felt). The roof screed must be laid to falls of not less than 1 degree from horizontal and the screed must be thoroughly dried before laying of bituminous is commenced.

The first layer shall be partially bonded to the roof deck with bitumen to allow sufficient easing of vapour pressure. The second layer shall be fully bonded to the first layer with minimum 150mm laps at ends and edges in bitumen. The top layer shall be similarly bonded to the second layer.

5.4. Aluminium roofing

5.4.1 Materials

Aluminium roofing shall be resin coated aluminium roof sheeting manufactured by ALUCO, and shall conform to the requirements of BS 2855 or 3455. The gauge and the surface finish of the sheets shall be as recommended by the manufacturer, in writing, and approved by the Architect/Engineer. All accessories shall be of aluminium alloy.

Whenever trough sheets and heavy trough sheets are used they shall comply with the requirements of BS 3428 type 'A' for trough sheets and type 'B' for heavy trough sheets.

5.4.2 Fixing

The sheets shall be fixed to steel angle or timber purlins with aluminium alloy bolts and nuts. The bolts shall be at least 50mm longer in the shank than the purlin to which they are fixed. All bolts shall have approved washers.

Fixing of the sheet must conform strictly to the printed instructions or otherwise to the requirements of CP 143 part 1 BS 2855.

5.5 Galvanised sheet roofing

5.5.1 Materials

Galvanised sheet roofing shall be corrugated iron as manufactured by GALCO and shall comply with BS. 3083:1959: Hot dipped galvanised corrugated steel sheets for general purposes. In addition to the manufacturer's recommendation. The gauge and the surface finish of the sheets shall be specified and approved by the Architect/Engineer.

Accessories shall comply with BS. 1091: 1963 "Pressed steel gutters, rainwater pipes, fittings and accessories".

5.5.2 Fixing

The sheets shall be fixed to steel angle or timber purlins with roofing nails, bolts and nuts or any other accessory to be approved by the Architect/Engineer.

Fixing of the sheet must conform strictly to the printed instructions or otherwise to the requirements of CP 143 part 2 BS. 2855:1962.

NOTE: ASPHALT FOR ROOFING SEE UNDER TRADE "ASPHALT WORK"

6.0 CARPENTRY 6.1 Timber generally

The timber used for carpentry shall be sound, well conditioned, properly seasoned to suit the particular use and free from defects or combination of defects rendering it unsuitable for the purpose intended.

All timber used structurally shall comply with the relevant requirements of and graded in accordance with the Export of Timber Ordinance (cap. 288); The export and Grading of Timber Rules 1969.

All timber is to be ordered as soon as the Contract is signed and is to be delivered to the site for open stacking for as long as possible before use. All timber will be inspected by the Architect/Engineer upon arrival at the site and if not approved by him shall be removed from the site forthwith. Notwithstanding the Architect/Engineer's approval, any timber incorporated in the Works found to be in any way defective before the expiry of the Defects liability Period shall be removed and replaced at the sole expense of the Contractor.

Timber shall be free from live borer beetle or other insect attack when brought to the site. The Contractor shall be responsible to the end of the Defects Liability Period for executing any work necessary to eradicate insect attack at his own expense including the replacement of timber attacked or suspected of being attacked notwithstanding that the timber may have been inspected already and passed fit for use.

6.2 Moisture content

All timber shall be seasoned to a moisture content; if not otherwise specified of not more than 15% The Contractor must allow for the costs of any kiln drying which may be necessary to obtain this figure.

6.3 Samples and testing

The Architect/Engineer/ engineer shall be entitled to select any samples he may reasonably require of materials or prototype of special construction elements for the purpose of testing (e.g. for moisture content; identification of species, strength etc)

6.4 Protection

All timber delivered to the site shall be stored under cover clear of the ground and protected from sun and dampness and shall be stored in a satisfactory manner to prevent attack of termite, insects or fungi.

6.5 Softwood

Timber for structural use, including rafters, purlins etc. shall be of Grade II strength and Grade 1 appearance. The softwood shall be a seasoned cypress, cedar pine or podo-carpus, which shall be pressure impregnated with the full cell process as described

below, but the contractor's attention is drawn to the Dayworks Schedule where the basic price of various timber requires pricing, in the event of one of these timbers being selected as an alternative then these basic rates will be used in calculating new rates for the item of carpentry concerned.

6.6. Pressure impregnation

The softwood described as pressure impregnated shall be treated with the "Celcure A" or "Tanolith C" full cell process. Timber must be seasoned to a moisture content not exceeding 25% before being treated. The treatment shall be to the minimum standard of:-

Solution concentration - 2 %

Absorption of preservative - 520 litres per cubic metre Net

dry salt retention -10.4 kg. per cubic metre

After treatment the timber shall be seasoned to the specified moisture content.

Cut ends and faces of timber sawn, drilled and cut after treatment are to be swabbed literally with approved preservative until saturated, allowed to dry and then treated with a second coat and rates for timber must include for this. Approved preservatives are:-

Atlas A. Brunophen Nr. 2, Cuprinol Clear or Water Repellent Clear EnscleWoodtreat 55.

Hardwood for structural and roof timbers shall be third grade scantlings, strength group E or other suitable and approved durable hardwood.

6.8 Preservative treatment

On delivery to the site all structural hardwood is to be treated with two coats of an approved timber preservative. After fixing, the hardwood is to be touched up as required with approved timber preservative.

The timber preservative shall be coal tar creosote to BS. 144 or other equal and approved applied either by brush or by spraying in accordance with the manufacturer's instructions.

Cut ends and faces of timber sawn, drilled and cut after treatment are to be swabbed liberally with approved preservatives until saturated, allowed to dry and then treated with a second coat and rates for timber must include for this.

6.9 Nails

Nails shall be galvanised and comply with B.S.1202 and screws with BS. 1210. Screws shall be brass unless otherwise described. Bolts , nuts and washers shall comply with BS. 916 and rag-bolts, coach screws and other accessories shall comply with BS. 1494. Washers shall be square minimum 3mm thick and 38mm sides.

6.10 Workmanship

"Unwrot" or sawn timber shall be as left from the saw and shall be the full dimensions stated.

All carpentry shall be executed with workmanship of the best quality. Scantlings and boarding shall be accurately sawn and shall be of uniform width and thickness throughout. All carpentry work shall be left with sawn faces except where particularly specified to be wrot.

All carpentry shall be accurately set out in strict accordance with the drawings
All structural timbers shall be framed or jointed together with as is most appropriate in the circumstances in accordance with the rules of good practice. Joints must be executed in strict conformity with the drawings.

All joints shall be secured with a sufficient number of nails disposed as shown on the drawings and rates must include for the jointing of timbers. Surfaces must be in good contact over the whole area of the joint before securing. Holes for nails must be pre-drilled undersize, holes for bolts must be bored slightly oversize from both sides of the timber and washers must be used under the nut which must be tightened sufficiently to permanently secure the joint but not to crush the timber.

7.0 JOINERY 7.1 General

The provisions contained in the carpentry section shall apply also in the joinery section where applicable.

7.2 Hardwood

Joinery is to be executed in approved prime, select and locally available hardwood. Hardwood generally will be Mninga (*Pterocarpus angolensis*) but hardwood for fittings and built in furniture may be Mkangazi (African Mahogany *Khayanyasica*) unless specifically described otherwise.

7.3 Workmanship

All timber shall be wrot by machine dressing on exposed faces, with all machine marks sanded out, unless otherwise specified.
The dimensions and thickness given in these Bills of Quantities are finished (unless otherwise stated). In the event of nominal sizes being stated, an allowance of 3mm should be allowed for each wrought face.

The joinery shall be worked strictly in accordance with the details drawings and is to be framed up and put together as soon as possible, and is to be stored for as long as possible before being wedged up. All joints and angles are to be glued and where necessary cross-tongued with hardwood tongues, and surfaces finished clean and smooth with machine marks sand papered out before fixing.

Should any of the joinery work shrink, wind or fly unduly before the end of the maintenance period of the contract, the work is to be taken down, and new work fixed in its place, together with any other works, which may thereby be affected at the Contractor's sole expense.

Where joinery is described as screwed, this is deemed to include sinking the head of the screws and pelleting with similar timber and grain in with finished joinery. Screws unless otherwise specified, shall be brass.

In pricing the items, the contractor will allow for nails and screws and fixing, all labours, cuttings, notching, hawling, mortising, tenoning and welding except where otherwise provided. Rates are also to include for one coat approved priming paint on all concealed surfaces.

Allow in the rates for easing and adjusting all doors, and leave in perfect working order.

7.4 Flush doors

Flush doors shall consist of hardwood core or framing covered with 6mm plywood both sides and complying where applicable with the requirements of BS. 459, Part 2 and 2A. Doors described as skeleton framed shall consist of framing 75mm wide to all stiles, top

and bottom rails, with suitable blocks to receive mortise locks on each long edge. Doors described as solid core shall comprise a solid core of vertical laminations. All flush doors shall be edged all round with 25mm thick hardwood lipping tongued and glued in. Doors described as external shall be covered both sides with 6mm 'exterior' quality plywood as described below. All flush doors shall be perfectly plain on both faces and free from all waves, ripples or distortions of any kind. Any door, which, after the application of paint or polish shows any defects of this nature, shall be removed and replaced at the Contractor's expense. Samples of flush doors, which the contractor intends to use, must be first submitted to the Architect/Engineer for his approval.

7.5 Plywood

Plywood shall be of Tanzania manufacture, manufactured from tropical hardwoods of the first grade with BS 145, and unless otherwise stated shall be 'interior' quality. Where stated to be of 'exterior' quality, the plywood shall be W.B.P. bonded weatherproof grade. Where veneered plywood is specified, samples must be submitted to the Architect/Engineer for his prior approval.

7.6 Blockboard

Blockboard shall be of Tanzania manufacture and comply with BS. 3444 and shall be of moisture resistant quality.

7.7. Chipboard

Chipboard shall comply with BS. 2604 resin-bonded wood chipboard.

7.8 Plugging

All work described as plugged shall be fixed with brass screws to plugs formed by drilling concrete, wall, etc. with a screw of suitable "philplug", "Rawplastic", or other approved plugging compound in accordance with the manufacturer's instructions.

7.9 Protection

Any fixed joinery which, in the opinion of the Architect/Engineer is liable to become damaged in any way shall be cased and protected by the Contractor until the completion of the works and the contractor must allow for this in his rates as no separate item for protection has been measured.

7.10 Ironmongery

All ironmongery will be fixed with matching screws to be supplied by the contractor/Client and the contractor must allow for adjusting locks and striking plates and handing over all keys on completion of the contract with identifying tags attached.

The contractor must also allow for oiling locks and hinges and leaving them in perfect working order

All ironmongery shall be manufactured by Union, Yale, Dryad or Newman-Tonks Ltd. or other equal and approved by the Architect/Engineer/Engineer. The following standard abbreviations have been used to describe the finish to ironmongery:-

S.C.P. -	Satin Chrome Plate
C.P. -	Chrome Plate (polished)
S.A.A. -	Silver Anodised Aluminium

8.0 STRUCTURAL STEEL WORKS 8.1 Generally

Steel angles, tees, channels and plates are to be weldable mild steel grade 434 in accordance with B.S.4360.

8.2 Welding

Electrodes for welding are to be in accordance with current British Standard in application

All welds are to be fillet welds of 5mm by size unless otherwise indicated.

8.3 Bolts

Bolts are to be black bolts in accordance with BS 4190 and all nuts, bolts and washers are to be hot dip galvanised. Bolt holes shall have a diameter of the bolt.

8.4 Painting

All steelwork is to be thoroughly cleaned, wire brushed and painted with two coats of red lead primer at the workshop and one finishing coat for aluminium paint. After erection any damage to the paint is to be made good and a further finishing coat applied.

9.0 METALWORK 9.1 Mild steel

Mild steel shall comply with B.S.15, Grade 1, and the sizes of all small section shall be in accordance with B.S.4 and 4A.

9.2 Galvanised work

Iron and steel, where galvanised shall comply with B.S.729, Part 1, entirely coated with zinc after fabrication by complete immersion in a zinc bath in one operation and all excess carefully removed. The finished surface shall be clean and uniform.

9.3 Aluminium

Aluminium shall be of the alloys described in and shall comply with B.S.1470. Aluminium sheet for flashings shall be soft temper, super purity S1 or S1A) and not less than 18 S.W.G(1.2mm) in thickness.

9.4 Smithing, welding and cutting

All smithing, welding; cutting and bending shall be soundly and neatly executed, care being taken not to overheat. All flame cut edged and welds shall be neatly ground off on completion. All welds shall be 8mm fillet welds to comply with Code of Practice 1856 unless shown otherwise.

9.5 Bolts

Mild steel bolts, nuts and washers shall comply with B.S.916 for black bolts with hexagonal heads and nuts, High Tensile Steel Bolts and nuts shall be in accordance with B.S.3139.

9.6 Anchor bolts

Anchor bolts in concrete for steelwork, etc., are to be self drilling anchor bolts of one of the following types:-

Phillips redhead concrete anchors,

Rawplug super drill anchors,

Split self drilling anchors,

Rates are to include for fixing complete with washer.

9.7 Louvre windows

Louvre windows frames are to be aluminium with a clear anodised finish as manufactured by NACO and obtainable from Casements Africa Ltd., or other equal and approved by the Architect/Engineer.

9.8 Metal doors

Steel for metal doors shall conform to the requirements of BS. 1245:1975.

9.9 Burglar bars

Burglar bars shall be as specified by the Architect/Engineer. The bars shall be cleaned and painted as described on trade of painting on metalwork.

9.10 Structural hollow sections

All hollow sections are to be connected by electric welding. For butt welds the fusion surfaces of each member must be aligned and prepared.

9.11 Mild steel tubing

Mild steel tubing shall be in accordance with BS 1387:1975 with screwed sockets and joints.

9.12 Shop inspection

The Architect/Engineer shall grant full facilities and any necessary assistance for inspection of materials and assembled parts in the contractor's (or his SubContractor) workshops. At least two weeks notice shall be given to the Architect/Engineer in writing prior to the dispatch of finished components to the site to enable the Architect/Engineer to inspect and approve the materials and workmanship at the workshops. Approval of work at the workshop does not relieve the Contractor of his obligations to carry out the work complete at the site to the Architect/Engineer's satisfaction in accordance with the contract.

9.13 Marking

All components delivered to the site are to be marked in paint with the Mark number in accordance with any shop and erection drawings.

9.14 Storage

All components are to be stored at site in proper racks provided for the purpose which provide full support to each member and to avoid any deflection and distortion. Steelwork is to be stored at least 250mm clear of the ground and temporary protection is to be provided for protection against water and damage from any other source.

9.15 Erection

Rates for all metalwork are to include for the complete erection including any temporary supports required and any necessary templates and wedges.

10.0 PLUMBING AND ENGINEERING INSTALLATION

10.1 PART ONE: GENERAL REQUIREMENT

10.1.1 SCOPE OF WORK

10.1.1.1 This specification contains general requirements for Plumbing services and associated equipment for water supply installations, sanitary installation, Gas installation and fire fighting installations and equipment.

10.1.1.2 The scope of work shall incorporate the supply, installation, testing and commissioning of the Plumbing services and associated equipment for water supply installation, sanitary installations, gas installations and fire fighting installations and equipment.

10.1.2.0 GENERAL CONDITIONS

10.1.2.1 The Contractor shall use a qualified approved plumber to perform the plumbing and engineering installation as a domestic subcontractor.

10.1.2.2 These specifications shall be read in conjunction with the specifications of the rest of the works. No claim will be entertained on the grounds of failure in this regard.

10.1.3.0 MATERIALS

10.1.3.1 Submission of Samples

The Contractor shall submit a list of suppliers from whom he proposes to purchase the materials necessary for the execution of the works. The Contractor shall be required to submit samples of the materials for approval. Samples shall be taken in accordance with the relevant British Standard where possible. No source of supply shall be changed without prior approval of the Engineer.

10.1.3.2 Rejected materials

All sub-standard materials or materials which become damaged or deteriorate so as not to comply with the specification shall be rejected and shall be removed from the site and replaced at the Contractor's expense.

10.1.4.0 SAFETY

Safety precautions throughout the execution of the Works shall comply to the Safety Acts as enacted and operating in the Republic of Tanzania.

10.2.0 PART TWO: GENERAL SPECIFICATION

10.2.1 EXECUTION OF THE WORK

10.2.1.1 The works shall be carried out by a specialist appropriately certified by the relevant Authorities and Boards for the type and/or value of the installations contained herein. Where no particular Specification is given for any material or item of work, the latest edition of relevant British Standard Specification shall apply. In the event of any disagreement between the information shown on the drawing and the specification, the drawing shall take precedence.

10.2.2

10.2.2.1

The works shall be carried out strictly in accordance with the following Standards and Specifications:

- "British Standard Specification for Design, Installation, Testing and Maintenance of Services Supplying Water for Domestic use within Buildings and their Cartilage" BS 6700: 1987.

- "British Standard Sanitary Installation: Part1: Code of Practice for Scale of Provision, Selection and Installation of Sanitary Appliances" BS 6465: Part 1: 1994.
- "British Standard Sanitary Installation: Part2: Code of Practice for Space Requirements for Sanitary Appliances" BS 6465: Part 2: 1996.
- "British Standard Drain and Sewer Systems Outside Buildings:
Part 4: Hydraulic Design and Environmental Considerations" BS EN 752-4: 1998.
- "British Standard Code of Practice for Drainage of Roofs and Paved areas" BS 6367: 1983.
- "British Standard Code of Practice for Sanitary Pipe work" BS 5572: 1978.
- "British Standard Fire Extinguishing Installations and Equipment on Premises: Part 0: Guide for the selection of installed systems and other fire equipment" BS 5306: Part 0: 1986.
- "British Standard for Eaves, Gutters and Fittings" BS EN 607: 1996.
- "British Standard for Gutter Brackets" BS EN 1462: 1997.
- "British Standard Fire Extinguishing Installations and Equipment on Premises: Part 3: Code of practice for selection, installation and maintenance of portable fire extinguishers" BS 5306: Part 3: 1985.
- Gas Safety (Installation and Use). Regulations, 1998.
Statutory Instrument 1998/2451. London: The Stationary Office, 1998.
ISBN 0 11 07 9655 1.
- By-laws of the Local Authority.
- The working drawings

10.2.2.0 EXTENT OF WORK

10.2.2.1 The work includes, unless otherwise specified, supply, installation, testing and commissioning and delivering up clean and in working order the installations shown in the drawings and specified in these General and Particular Specifications.

Water supply shall be from rainwater harvesting system from laboratory roof with plastic storage tank, cold water pipes and associated fittings, valves, sanitary appliances including all necessary taps, overflows and discharge fittings, fire fighting installations and equipment, and all labour, materials, tools and instruments necessary to execute the work in a first class manner,

even such labour or materials which are not specifically mentioned herein but necessary for completion of the work.

- 10.2.2.2 The Contractor shall be responsible for ensuring that runs for floors or wall chases, holes to cut or left will be marked out at the appropriate stage of the structural work. The Contractor shall undertake all modifications demanded by the Authorities in order to comply with current regulations, and produce all certificates, if any, from the Authorities without extra charge.

10.2.3.0 EXTENT OF CONTRACTOR'S DUTIES

- 10.2.3.1.1.1.1 At commencement of the work, the Contractor shall investigate and report to the Architect/Engineer if all materials and equipment to be used in the work, and not specified as supplied by others are available locally. If not available, the Contractor shall at this stage place orders for the materials in question and copy the orders to the Architect/Engineer. Failure to do so shall in no way relieve the Contractor from supplying the specified materials and equipment in time.

- 10.2.3.2 Where the Contractor wishes to propose an alternative method of construction or material to that specified for any part of work, full details shall be submitted for approval. The acceptance or otherwise of any alternative shall be entirely at the discretion of the Architect/Engineer. Materials supplied by others for installation and/or connection by the Contractor shall immediately be reported to the Architect/Engineer. The Contractor shall be responsible for verifying all dimensions relative to his work by actual measurements taken on the site.

10.2.3.3 As built drawings

At practical completion and before final payment certificate is issued, the Contractor shall provide a complete set of "As Built" record drawings of the entire installation. Drawings shall be in a scale and size approved by the Architect/Engineer and submitted in hard bound volumes for each service of water supply installation, sanitary installations, Gas installation and fire fighting systems. Shop drawings, spare parts list, operation and maintenance manual of equipment installed shall be submitted together with the "As Built Drawings".

10.2.4.0 QUALITY OF MATERIALS AND WORKMANSHIP

10.2.4.1 Materials and workmanship

- 10.2.4.1.1 All materials, equipment and accessories are to be new and in accordance with the requirements of the current rules and regulations where such exist, or in their absence with the relevant British Standards. Uniformity of the type and manufacture of the equipment or accessories is to be preserved as far as practicable throughout the whole work.

10.2.4.1.2 The Contractor shall, if required by the Architect/Engineer, submit samples of materials to the Architect/Engineer for his approval before placing on order. If in this general specification, the practice is adopted of specifying a particular item as "similar" to that of a particular product, it is to be clearly understood that this is to indicate the type and quality of the equipment required. No attempt is being made to give preference to the equipment supplied by the firm whose name or product is quoted. Where particular manufacturers are specified herein, no alternative makes will be considered, and the Architect/Engineer shall be allowed to reject any other makes.

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

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

10.2.4.2 Pipes and Pipe Fittings

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

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

10.2.4.2.3 Pipes shall be fixed to true lines, parallel to adjacent lines of the building unless otherwise specified. Where insulated, pipes shall be fixed with the insulation at least 25 mm clear of adjacent surfaces. The spacing for fixings for internally located piping shall be in accordance with BS 6700: 1987 Table 17.

10.2.4.2.4 Each support shall take its due proportion of the weight of the pipe and shall allow free movement for expansion and contraction. All pipes specified as chased into walls shall have the wall face neatly cut and chased, the tubing wedged and fixed and plastered over. Where pipes are laid in trenches care shall be taken to ensure that fittings are not strained.

10.2.4.2.5 All formed bends shall be made so as to retain the full diameter of the pipe. Sleeves shall be provided where pipes pass through walls and solid floors to allow movement of the pipes without damage to the structure. The overall length of the sleeves shall be that it projects at least 2 mm beyond the finished thickness of the wall or partition.

10.2.5.0 TAPS AND VALVES.

10.2.5.1

Taps and valves shall be in accordance with the following Standards:

- Draw-off taps and stop valves shall comply with BS 1010 Part 2: 1973.
- Copper alloy gate and check valves shall comply with BS 5154: 1991.
- Copper floats for ball valves shall comply with BS 1968: 1953 and plastic floats for the same shall comply with BS 2456: 1990.
- Sluice valves shall comply with BS 5163: 1991.
- Draining taps shall comply with BS 2879:1988.

10.2.5.2 All valves and cocks shall have the same flow areas, as the corresponding pipes and shall be accessible for operation and maintenance and suitably labelled by an approved method. Stop valves shall be fixed in positions shown on the drawings to form branch services for group control, or where else specified.

10.2.5.3 All valves, cocks and taps shall be of the correct pressure rating according to the recommendations of the relevant British Standards or the local authority. At commencement of the contract, the Contractor shall, if necessary, ask the Architect/Engineer for guidance on this point.

10.2.6.0 SANITARY AND OTHER APPLIANCES

The appliances shall be fixed in the positions shown on the drawings or as directed by the Architect/Engineer. The Contractor shall include in his rates for providing all necessary screws, bolts, etc. together with all jointing material required and also for temporarily erecting and securing fittings and in the required position of service and discharge pipes, taking down, storing and fixing after completion of wall finishing, permanently fixing and connecting to service and discharge.

Care shall be taken at all times and particularly after fixing to protect appliances from damage. Upon completion of the work all appliances shall be cleaned for plaster, paint, etc. and carefully examined for defects.

10.2.7.0 FIRE FIGHTING EQUIPMENT

10.2.7.1 The specified fire fighting equipment shall be supplied and installed by the Contractor in the position shown on the drawings.

10.2.7.2 Supply, installation and maintenance of fire fighting equipment shall be in accordance with the following British Standards BS 5306: Fire extinguishing installations and equipment on premises:

- Part 0: 1986: Guide for the selection of installed systems and other fire equipment.
- Part 3: 1985: Code of practice for selection, installation and maintenance of portable fire extinguishers
- BS 5499: Fire safety signs, notices and graphic symbols Part 1:1995: Specification for fire safety signs

10.2.8.0 GAS INSTALLATION SPECIFICATION

10.2.8.1 All male gas tap assemblies shall be supplied with 3/8" BSP (BS 2779 G3/8"B) male shank 60mm long. Shanks shall be supplied with flat ends suitable for connection with 3/8" BSP female threaded connectors.

10.2.8.2 The male gas tap assembly shall require a 17mm diameter hole drilling in the work surface. Care shall be taken to ensure that the outlet nozzles are in a suitable position so that the safety lever has sufficient clearance to function correctly and is clearly visible from a distance. Anti-rotation nuts shall be used for added security.

10.2.8.3 Gas supplies shall be within the range of 20 to 25 Mbars air pressure and supplied by means of copper tubing. As with all gas valves and appliances, assemblies shall be soundness tested on a regular basis to ensure safety.

10.2.8.4 Emergency Eye Wash with two streams with ABS bowl shall be provided to give an immediate deluge of water that should dilute and wash away injurious materials, such as caustic acids, fire, radioactive materials.

10.2.8.5 A manual shutoff valve at the pipe entry to each laboratory shall be provided.

10.2.8.6 Gas pipes shall be ventilated along their run by being exposed or/and by the enclosure being punctuated to provide adequate ventilation to avoid explosion due to a build up of gas in the case of leakage.

10.2.8.7.1.1.1 Gas pipes shall be well supported particularly where they are part of a flexible overhead servicing system or at a height accessible to pupils

10.2.9.0 INSPECTION AND TESTING OF COMPLETED INSTALLATIONS

10.2.9.1 Testing equipment shall be supplied by the Contractor for the period of execution of works. The equipment shall be set up and maintained in accurate working order throughout the period of use.

10.2.9.2 The Contractor shall provide all necessary testing apparatus and facilities for testing the installations and any defective work shall be replaced immediately and shall be subject of re-testing until found satisfactory.

10.2.10.0 INSPECTION AND TESTING OF WATER SUPPLY PIPE WORK

10.2.10.1 Testing for underground pipelines

10.2.10.1.1 The installation to be tested shall be inspected for compliance with the drawings and specifications. Significant variations shall be investigated and corrected, if required, before proceeding with the test.

10.2.10.1.2 After laying, jointing and anchoring, the pipeline shall be slowly and carefully filled with water so that all the air is expelled and tested under pressure. If water from supplier's mains is used for filling the pipeline under test, the main shall be disconnected from the pipeline before the test is begun.

10.2.10.1.3 Testing shall be carried out in accordance with BS 6700: 1987 5886, appropriate to the material of the pipeline. Interim tests shall be applied to every pipeline. For buried pipelines these shall be carried out before back filling is placed over the joints. Long pipelines shall be tested in sections as work proceeds. Final tests shall be carried out only when all relevant work is complete. Completion for buried pipelines includes back filling, compaction and surface finish.

10.2.10.1.4 The test pressure shall be at least twice the working pressure of the pipeline. Precautions shall be taken to ensure that the required test pressure is not exceeded. Pressure gauges shall be checked and re-calibrated, where necessary, before the test. To avoid the risk of contamination, water used for testing shall be obtained from a potable supply.

10.2.10.1.5 Before accepting a pipeline, a check shall be made that valve and hydrant boxes are properly aligned, that suitable operating keys are provided which can be easily fitted to the valves and, in the case of deep valves, that adequate extension spindles are installed.

10.2.11.0 INSPECTION AND TESTING OF SANITARY PIPE WORK

10.2.11.1 Inspections and tests should be made during the installation of the discharge System in accordance with BS 5572: 1978, as the work proceeds, to ensure that the pipe work is properly secured and clear of obstructing debris and superfluous matter and that all work which is to be concealed is free from defects before it is finally enclosed.

10.2.11.2 The completion of the discharge system should be meticulously inspected to ensure that the recommendations of the code have been observed and that no cement droppings, rubble or other objects are left in the pipes and that no jointing material

projects into the pipe bore. When this has been done, tests for soundness of the pipe work and for performance should be made.

10.2.12.0 INSPECTION AND TESTING OF FIRE EXTINGUISHING INSTALLATIONS

10.2.12.1 The date and programme of acceptance tests shall first be notified to all parties involved, and a joint inspection of the system shall then be made. Before testing commences, an indemnity shall be obtained, signed by the client or the person responsible for the premises at the time.

10.2.12.2 The agreed test programme shall then be carried through and the following shall be recorded:

- The date and time of inspection/test
- The responsible person carrying out/witnessing tests
- The test programme
- The test results and conclusions
- Any external factors significantly affecting the test
- Subsequent action agreed to be required
- The work carried out as a result of external factors and the result test if any
- The final test report.

10.2.13.0 INSPECTION AND TESTING OF GAS INSTALLATIONS

10.2.13.1 All drop gas tap assemblies shall be tested to 5psi before leaving the factory. All gas installations incorporating VultexLabline drop lever gas tap assemblies shall not exceed 75 Mbar test pressure to ensure that the sealing and lubricating media is not displaced.

10.2.13.2 Detailed inspection of fume cupboards, gas pipe work and controls shall be carried out at least once a year

10.3.0 PART THREE: PARTICULAR SPECIFICATION

10.3.1.0 PLUMBING

External plumbing for water supply shall be of polyethylene pipes, uPVC pipes for underground rainwater collection system and polypropylene pipes for internal plumbing while vulcathene chemical waste pipes shall be used for both internal and external drainage.

10.3.2.0 STORAGE TANKS

Overhead water storage tanks with capacity of 3000 litres, Simtank 1.70 metres diameter and 1.7 metres height on 1.5metres blockwork tower shall be provided.

10.3.3.0 FIRE FIGHTING

12 kg ABC dry powder portable fire extinguishers shall be provided.

10.3.4.0 WASTE WATER DISPOSAL

Soak-away pit shall be provided with manhole constructed of block work.

10.3.5.0CHEMICAL WASTE DISPOSAL

Emergence eye wash sink with two streams with ABS bowl inclusive of fittings shall be provided.

10.3.6.0SOLID WASTE DISPOSAL

10.3.6.1 Movable plastic bins of capacity of 20 litres shall be provided for temporary collection of solid waste.

10.3.6.2 Incinerator constructed in blockwork and lined with clay burnt bricks inside shall be used for burning solid waste that cannot be buried.

10.3.6.3 Ventilated Improved Pit Latrine (V.I.P.) shall be provided.

11.0 FLOOR, WALL AND CEILING FINISHINGS

11.1 Sand

Sand for backings, floor and wall finishes is to comply with B.S.1199, Table 1.

11.2 Aggregate

Coarse aggregate is to be as described for 'concrete work'.

11.3 Cement

Cement is to be as described for 'Concrete Work'.

11.4 Lime

Lime is to be non-hydraulic hydrated lime to B.S.890 Class 'A' obtained from an approved source and run into putty at least 24 hours before use.

11.5 Workmanship

All concrete beds or slabs shall be thoroughly brushed if necessary and well wetted and flushed over with a cement and sand (1:1) grout immediately before screeds or pavings are laid

Screeds and cement pavings shall be laid in accordance with the relevant BS. Code of practice. Working joints between bays of the floor finish should be placed in accordance with the Architect/Engineer's instructions and will be plain butt joints placed over joints in the concrete bed under. Pavings shall be damp cured with sand or sawdust and kept damp for at least 7 days after laying.

All surfaces to be plastered or rendered must be brushed clean and well wetted before plaster is applied. Joints of walling shall be raked out and concrete hacked to form a key. Care shall be taken to see that paving and plastering do not dry out prematurely. Adequate time intervals must be left between successive coats in two coat work in order that the drying shrinkage of the undercoat may be substantially complete. All internal and external angles shall be pencil rounded.

11.6 Insitu pavings generally

Before laying in-situ floor finishes, the concrete beds are to be thoroughly hacked for key, cleaned off, thoroughly wetted with clean water and coated with a stiff cement slurry and rates for screed granolithic and terrazzo paving are to include for this. They are also to include for all necessary curing and protecting until the building is handed over to the Employer.

11.6.1 Cement and sand paving

The cement and sand paving shall be in the proportions of 1:3 by volume and incorporating or treated with an approved hardener. A mix referred to as 1:4 shall mean 1440kgs (1m³) of cement and 4m³ of sand. All other mixes shall be construed in a like manner.

11.6.2 Concrete paving

The concrete paving shall be in the proportions of 1:2:4 by volume, the coarse aggregate used shall not exceed 10mm nominal size. It shall be trowelled smooth with a steel float. If the contractor wishes to use a power float he is to seek the approval of the Architect/Engineer who may require him to complete a sample area before granting permission.

11.6.3 Terrazzo paving

The in-situ terrazzo shall consist of white or coloured cement and marble aggregate; the colours of the cement and aggregate shall be selected by the Architect/Engineer. The mix shall comprise three parts of 6mm nominal aggregate to one part coloured cement by volume. The aggregate shall be clean and granular and shall not contain flakey particles or duct. The underbed shall be cement and sand 1:4 by volume. The terrazzo topping shall be laid to a minimum of 12mm thickness in a plastic condition while the underbed is still green and this should be watered to minimise absorption from the topping. The terrazzo must be well tamped into position and rolled with a suitable hand roller. The topping should be allowed to take an initial set and then any surface voids must be grouted up with neat cement of the same colour used in the mix. The sacking for at least 72 hours. When dry and hard, the surface shall be machine polished by grinding with carborundum or other stone discs of suitable grade and with rotary polishing pads.

11.6.4 Tyrolean rendering

Tyrolean rendering is to be applied in four coats to obtain a total thickness of 22mm and adequate time intervals must be allowed between successive coats in order that the drying shrinkage at each undercoat may be completed. The first coat shall consist of cement, lime putty and sand mixed at a minimum thickness of 10mm and finished with a wood float finish. The second, third and fourth coats shall consist of one part of natural cement to four parts of fine white chippings including colour pigment to approval applied with an approved "flicking machine" so that the first coat is completely covered and a thickness of 12mm is obtained.

11.6.5 Internal plaster

Internal plaster shall be applied in two coats and adequate time intervals must be allowed between successive coats in order that the drying shrinkage of the undercoat may be substantially complete. The first coat must be well scratched keyed and wetted to receive the finishing coat. The finishing coat shall be finished smooth with a steel float but care must be taken not to overwork the surface in order to minimise the incidence of shrinkage cracks. All internal and external angles shall be pencil rounded.

Internal plaster, unless otherwise described, shall be lime plaster of 15mm minimum overall finished thickness applied in two coats, the first coat consisting of cement, lime putty and sand mixed in the proportions of (1:2:9). The finishing coat shall be a skin coat comprising cement and lime putty in the proportion of (1:10).

Cement plaster is to be employed where specified on the drawings and is to be applied in two coats of approximately equal thickness to a total of 15mm minimum overall finished thickness. The composition of both coats shall be the same and shall comprise cement and sand (1:4) but a small percentage addition (not more than 10%) lime putty may be permitted if the Architect/Engineer considers that this will reduce the incidence of shrinkage cracks.

The contractor shall cut out and make good all cracks, blisters and other defects and leave the whole of the plastering and rendering perfect at completion. When making good defects the plaster shall be cut out to a rectangular shape with edges undercut to form dovetailed key, and all finished flush with the face of surrounding plaster.

11.6.6 "Sandtex" finish

'Sandtex' finish shall consist of one part white cement to four parts sand by volume applied in two coats in the manner as described for internal plastering to a total thickness of 15mm and the final coat wet brushed to expose the sand to a texture to be approved by the Architect/Engineer.

11.7. Wall tiling

Glazed wall tiles shall be from an approved manufacturer and shall conform with the requirements of BS. 1281. Tiles shall be with slightly rounded or 'cushion' 'edges' and unless otherwise described shall be 150 x 150 x 6mm thick. Tiles shall be laid with continuous straight joints and internal angles shall be butt jointed.

Rounded on edge tiles shall be used on all external angles and edges of panels. Tiles shall be bedded in approved tile adhesive and pointed in white cement.

Backings to tiles are to be cement and sand in the proportion of 1:4 rendering in one coat to a minimum thickness of 12mm trowelled smooth.

11.8 Wood block flooring

Parquet tile flooring shall be as manufactured by Italwood Ltd. Dar Es Salaam Tanzania or other equal and approved by the Architect/Engineer. It shall be laid on a smooth screed and fixed with approved adhesive. It shall be finally sanded and finished with two coats of Ronseal Hardglaze.

11.9. PVC Flooring

PVC. tile flooring shall be used according to specified standards with an approved base. The selected colours to be used shall be approved by the Architect/Engineer.

12.0 GLAZING 12.1 General

Glass generally shall comply with the requirements of B.S.952 and shall be free from bubbles, specks waves, flows or any other defects.

Clear sheet glass shall be 24 or 32 oz. (4 or 5mm nominal thickness) flat drawn sheet of ordinary glazing quality.

Glass for louvre blades shall be clear sheet flat drawn or rough cast obscured rolled glass to the thickness shown on the drawings with all exposed edges ground and polished.

12.2 Putty

The putty shall be hard setting tropical putty to B.S.544

12.3 Workmanship

All glass is to be accurately cut to fit easily into rebates with a tolerance of 2mm all round. It is to be well puttied at the back and to the sprigged with non-ferrous pins.

The putty is to be mostly trimmed and cleaned off and care must be taken that it does not show beyond the slight lines of the sashes. All rebates must be treated with one coat of lacquer (as described under 'Painting' hereafter) prior to glazing.

12.4 Cleaning and protection

The contractor must allow in his rates for the protection of all work in this section and for replacing any cracked, scratched, broken or defective glass prior to handing over to the Employer. He must also allow for cleaning all the windows inside and out and other glass on completion with an approved window cleaner and wash leather and for removal of all paint splashes.

13.0 PAINTING

13.1 Colour range

All painting shall be carried out in colours selected by the Architect/Engineer.

13.2 Materials

Paints generally shall be ready mixed and supplied by one of the manufacturers listed below and delivered to the site in sealed containers clearly labelled with the a manufacturer's name, type of paint and colour. Oil based priming paint shall comply with B.S.2521-2524 inclusive.

Leyland Paints (T) Ltd

Robbialac Paints (T) Ltd

Sadolins Paints (T) Ltd

Goldstar Paints Tanzania Ltd

Paints are to be used strictly in accordance with the manufacturer's instructions and no contamination by mixing with other brands or materials will be permitted. Thinning is only permitted in so far as it is in accordance with the manufacturer's printed instructions.

13.3 Preparation

All surfaces to receive treatment are to be clean and dry before paint application and surface irregularities are to be removed by filling or the use of suitable abrasives.

13.4 Plastered surfaces

Internal plastered wall surfaces generally are to be treated with plastic emulsion paint. Surfaces are to be allowed to dry out thoroughly prior to paint application. All crack and surface imperfection are to be cut back and filled with a patent filler in accordance with the manufacturer's instructions and rubbed down to a true and even surface.

Apply one primer coat thinned with water and two subsequent coats of Leyland's 'Leymure Co-polymer' or other approved plastic emulsion paint in accordance with the manufacturer's instructions. Where specified internal plastered wall surfaces are to be painted gloss. In addition to the preparation described above, apply one coat of Leyland's P 20 or other approved alkali, resistant primer and flat down with 320 grade 'wet or dry' abrasive paper. Apply two coats Leyland's 'Leylac Polymeric gloss finish or other equal and approved gloss paint lightly rubbed down coats in accordance with the manufacturer's instructions.

13.5 Woodwork preparations

Large knots in woodwork are to be cut back and replaced with sound wood or scorched back and after priming the surface made good with stopping. All knots are to be treated with two thin coats and patent knotting free from resin.

After priming all nail holes and other imperfections shall be filled with stopping and the whole surface rubbed down to a smooth even finish. The stopping must be 'Scadofil' or other approved make.

13.6 Metalwork

All rust and loose scale on steel and ironwork must be removed by wire brushing and rubbing with emery paper. Where patches of ingrained rust cannot be removed they are to be thoroughly rubbed down and treated with one coat of 'Galvafrid' or other zinc paint in accordance with manufacturer's instructions. One coat of zinc chromate primer will then be applied followed by two undercoats and one finishing coat of gloss paint as described for woodwork above. The contractor is to note that where mild steel burglar bars are housed into wood frames the full length of the bar is to be treated before fixing.

Galvanised metalwork is to receive one coat of white spirit or mordant degreasing solution washed off prior to the application of calcium plumbate primer followed by two undercoats and one finishing coat of gloss as previously described.

Galvanised metalwork is to be painted only where instructions are given by the Architect/Engineer as in some cases galvanised metalwork is to be left untreated.

14.0 DRAINAGE

14.1 Generally

The preambles for the previous trade sections are applicable to this section together with the following preambles. The drainage is to be carried out in accordance with the

directions of the Architect/Engineer and the requirements of the Byelaws. No length of drain is to be covered until it has been tested and passed.

14.2 PVC drain pipes

PVC Drain pipes comply with ISO R161 (4kg/cm²) 'Pipes of plastic materials for the transport of fluids.

The drainpipes shall be spigot and socket glued joints.

14.3 Cast iron drain pipes

Shall be centrifugal cast (spun) iron drainpipes with spigot and socket to BS.437 thoroughly coated inside and outside, alternatively similar pipes but class 'B' in accordance with BS. 1211 may be used according to availability. Fittings shall be in accordance with BS.1130.

Pipes shall be jointed with asbestos yarn and caulked with molten lead or jointed with special jointing compound all to approval.

14.5 Concrete drain pipes

Precast concrete pipes shall be in general conformity with BS. 556. Concrete cylindrical pipes and fittings. The concrete mix used for the manufacture of ordinary pipes shall not be weaker than grade '30'.

For foul water drainage sulphate resisting concrete pipes shall always be used. The manufacturer of sulphate resisting pipes shall be in general conformity with BS. 556. The concrete mix not weaker than grade '30'. Pipes up to and including 45cm diameter shall be un-reinforced and shall incorporate spigot and socket type joints. Pipes above 45cm diameter shall be reinforced with not less than steel fabric required by British Standard BS 8110 or the equivalent in mild steel and shall have spigot and socket joints or if the Architect/Engineer so approved shall have open type joints. The main reinforcement to be in circumferential direction. Pipes reinforcement shall be placed midway between the inner and outer surfaces of the concrete. In socketed pipes the reinforcement shall be extended continuously from the pipe barrel into the socket, the longitudinal bars cranked as necessary.

No wall thickness of the pipe barrels is specified but the reinforcement (if any) and the wall thickness must be so balanced that the pipes are in conformity with B.S.556 and the test specified therein.

14.6 Pitch impregnated fibre drainpipes

Pitch impregnated fibre pipes, couplings and fittings shall comply with BS. 2760 Part 1 and 2.

14.7 Manholes

Manholes shall be constructed on drain lines in the positions indicated or wherever ordered by the Architect/Engineer.

Manholes on pipe drains be constructed with an-in-situ base in concrete grade "20" which shall be raised to form the benching and invert of the manhole. The benching and channels shall be carefully formed to shape according to the number, diameter and positions of the incoming and outgoing pipes. The channels in the manholes base shall have circular inverts. The benchings shall be sloped towards the channels at a gradient of 1 in 6 or as otherwise detailed on the drawings.

Benching shall be carried out in concrete grade "20" and rendered with 15mm 1:3 cement mortar. Rendering to be carried out in sulphate resisting cement for foul water drainage. The ends of all entering the manholes are to be carefully cut to shape to suit the internal dimensions of the manholes and are to be as short as possible and are to be surrounded with 150mm concrete up to the first pipe joint.

The manhole shall be constructed in accordance with the drawings for typical and special manholes.

Manholes cast iron steps for manholes shall comply with BS. 1247. All steps be hot dip galvanised after manufacture.

Manhole covers and frames shall be in accordance with the requirements of BS. 497 and as specified on the drawings.

14.8 Concrete beds etc

Concrete beds shall be grade "15" laid to correct falls, 300mm wider than the external diameter of the pipe. Rates are to include for laying in two parts, the first part being laid on the trench bottom 75mm thick and allowed to set before pipe laying is commenced. Individual pipes shall be firmly supported on precast concrete blocks placed immediately behind the socket and in such a manner that each pipe is accurately position in both line and level and the underside of the barrel is at least 75mm above the top of the concrete.

After the joints have been made and the pipelines satisfactorily tested, the first layer of the concrete bed shall be thoroughly washed down and cleaned and the remainder of the bedding concrete (and the launching or surrounding concrete where required) shall be placed and consolidated under and around the pipe in such manner as not to cause any damage or disturbance to the pipe or joints.

The contractor is to ensure that his method of placing this second layer of concrete is such that the full length of each pipe is fully supported. The overall depth of beds is to

be in accordance with the table given on the drawings. Where pipes are specified to be haunched, the bed shall be brought up with the second layer of concrete to a minimum overall depth of 150mm to the underside of the barrel of the pipes plus half the diameter of the pipe and then sloped up to the top of the barrel of the drain pipes. Where pipes are specified to be surrounded, the bed shall be brought up with the second layer of concrete to a minimum overall depth of 150mm to the underside of the barrel of the pipe and then completely surrounded with concrete with 150mm minimum cover all round. Rates for this item are to include for any formwork required.

14.9 Trenches and manhole excavation and back filling

The bottom of drain trenches is to be trimmed and consolidated to correct levels and gradients. If any trenches are over-excavated the contractor to fill up to the proper depth at his own expense with concrete grade "10" where required. Rates for drain trenches are to include for grading bottoms, any necessary planking and strutting and keeping the excavations free from water, returning, filling in and ramming ground over and disposing of surplus material to spoil heaps on site. They shall also include for sieving and hand filling trenches where required for the first 300mm over the drainpipes.

Back filling shall be executed with selected material in 150mm layers (300mm layers if a mechanical rammer is used) each layer being well rammed and watered to obtain

the maximum compaction. Care be taken to ensure that no stone or other work is placed within 300mm of such work.

Rates for manhole excavation shall include for levelling the bottoms. All surface material including top soil which differs in any nature whatsoever from the substrata, shall in every case be carefully set aside and stored separately from other excavated materials. No claim for extras will be allowed for setting aside topsoil for later use.

14.10 Pipe laying and jointing generally

All laying and jointing of pipes shall conform generally with C.P. 301. Each cast iron, or concrete pipe shall be tested for soundness before laying by striking with a hammer and any pipe or joint which does not ring true or which shows in any other way any sign of being defective shall be regretted.

Each pipe shall be laid accurately to line and gradient so that the finished pipeline shall be in a straight line both in horizontal and vertical planes. The contractor shall fix properly painted and securely positioned sight rail, the levels and positioning of which shall be checked by the Architect/Engineer's representatives before the rails are used and as often thereafter as may be necessary. There shall be at no time less than three sight rails in position on each length of pipeline under construction to any one gradient and the sight rails shall be situated vertically above the line of pipes or immediately adjacent there

14.10.1 Jointing PVC Drain pipes

The type of joint used for drain PVC pipe is cemented spigot and socket. The jointing procedure is as follows:-

- i) The spigot end shall be chamfered
- ii) Clean spigot and socket with wet cloth and let dry iii) Un-grease spigot and socket with acetone iv) Mark length of joint and spigot
- v) Apply first a relatively thick layer of cement onto spigot and then a thin layer into socket
- vi) Flush home the joint to the mark quickly and give at once a 90 twist. vii) Remove pressed out cement
- viii) Do not disturb the joint for five minutes whilst cement is hardening
The cement used shall be supplied by the factory, which is supplying the pipe.

14.10.2: Jointing precast concrete pipes

The contractor shall adopt such measures as may be approved by the Architect/Engineer to ensure that every laid down pipe is concentric with previously laid pipes with which it joints. Unless otherwise approved pipes shall be laid in an up-gradient direction and the spigot shall be laid in the direction of the flow. Before commencing the laying operation, the contractor shall ensure that the portions of pipe, which come into contact with jointing materials, are perfectly clean. Cement mortar joints for concrete pipes with spigot and socket joints shall be made as follows:-

- i) Before commencing the jointing operation the socket of the previously placed pipe and the spigot of the new pipe shall be cleaned and thoroughly soaked with water.
- ii) The spigot shall be wrapped one complete lap with tarred hemp spun yarn and the new pipe shall be carefully drawn towards the previously laid pipe so that the spigot enters the full depth into the socket of the previously laid pipe. The new pipe shall then be adjusted and fixed in its correct position in line, level and gradient and the yarn shall be caulked tightly home into the socket. On completion of this operation the yarn shall not fill more than one quarter of the total depth of the socket.
- iii) The remainder of the socket shall be completely filled with cement mortar consisting of one part of cement (sulphate resisting cement for foul water drainage) to three parts of sand. The mortar filling shall terminate flush with the socket and shall be neatly trowelled to a smooth finish completely around the pipe.
- iv) To assist the curing of the mortar the contractor shall cover the joints immediately after they are made with a layer of hessian which shall be kept continuously wet during daylight hours and he shall further adopt such other measures as the Architect/Engineer may direct all at the Contractor's expense.

14.11 Position of floor gullies etc.

The contractor shall before positioning floor gullies duck-foot bends for ventilating stacks etc. consult the Architect/Engineer in order to ensure the correct position of these. Failure to do so, shall in no way relieve the contractor from positioning floor gullies, duck-foot bends for ventilating stacks etc. in positions, the Architect/Engineer later may direct.

14.12 Testing

After the drains are laid and jointed and before the trenches are filled in, they are to be tested in the presence of the Architect/Engineer's representatives. The drains shall be tested in lengths between manholes or such shorter lengths as the representative or the Architect/Engineer may approve.

Water shall be passed into the length under test until such time as all the air has been expelled and the line is full of water and subjected to a head of 1500mm at the upstream end. The test shall be considered to be satisfactory if there is no visible leakage, see page or weeping from any of the pipes or joints and if the head of water in a 76mm diameter upstand tube fitted at the upstream does not fall at a rate faster than 12mm per minute per 30 metres length. The contractor shall make such time allowance as may be necessary for the pipe to absorb water being subjected to test. Manholes are to be tested for water-tightness in the same way as for drains by filling with water but not exceeding 1500mm head.

The contractor is to supply all testing apparatus and materials necessary for these tests and provide all labour and assistance required. Any failure whatsoever in the drainage system to withstand the specified tests and any defects appearing are to be made good and the drains re-tested to the satisfaction of the Architect/Engineer.

15.0 EXTERNAL WORKS - ROADS AND PARKINGS:

15.1.0 Earthworks 15.1.1 Dimensions:

All earthworks shall be executed to the plan, dimensions lines, slopes, widths and levels shown on the Drawings or supplied by the Engineer. Typical cross-sections and details shall be subject to variation to accord with the contours, levels and falls shown on the Drawings or supplied.

15.1.2 Protection of earthworks

Earthworks shall be properly protected at all times against the risk of damage from natural causes. The Contractor shall take every precaution against damage from sudden storms by phasing the works and by covering, pumping, shoring and forming temporary drains and sumps. Earthworks shall be excavated at all times to levels and falls, which effect drainage. No work shall be carried out which allows the possibility of water to stand in any construction area.

Any earthworks, whether under construction or complete, which suffer damage shall be removed and the work made good with materials and methods required by the Engineer at the Contractor's expense.

15.1.3 Drainage of earthworks

Earthworks shall be executed at all times to levels and slopes, which effect drainage. Water shall not be permitted to stand in construction area at any time. It may be necessary to keep the excavation clear of water by pumping, in which case the contractor shall allow for this. The Contractor shall provide, maintain and operate the pumping equipment, and shall construct such drains and sumps as may be necessary to remove the water from the excavations.

Water shall be dealt with in such a manner as will prevent the surfaces on or against which structures will be constructed from any deterioration of their natural conditions, or from such condition as improved by work executed under the Contract.

15.1.4 Spoil

Spoiling of surplus or unsuitable excavated material within the site may not be permitted and the Contractor's rates for excavation should therefore include for running to an external spoil tip approved by the appropriate authority. No borrow pits shall be opened on the site.

15.1.5 Formation

The formation is defined as the surface obtained after completion of earthworks, i.e. the top surface of the sub-grade and the underside of the initial layer of construction

15.1.6 Topsoil

Surface spoil shall be removed from all construction areas to the depth stated or required by the Engineer. Sufficient soil shall be stockpiled on site to enable a minimum thickness of 150mm to be returned to those areas, which are designated for grassing or landscaping, and the remainder shall be run to spoil. The Contractor is to

exercise care to ensure that topsoil, is not contaminated with subsoil or construction materials. Should this occur he shall supply replacement topsoil in quality approved by the Engineer at his own expense.

15.1.7 Placing of fill material

Material selected for use as fill shall be approved by the Engineer and shall generally be selected from that obtained during excavation work. Fill shall be placed in layers with upper surfaces parallel to the finished surface of the works and with compacted thicknesses not exceeding those shown on the Drawings unless otherwise agreed by the Engineer.

Layers shall be of uniform thickness after placing any lower make-up layers. The layers shall be of a length suited to the progress of the plant employed in placing and compacting in order to avoid exposure.

All roots, other organic matter, unsuitable material or deleterious substances shall be removed from fill before compaction commences.

Fill layers shall be compacted to 90% BS. Compaction throughout their depth except for the final layer under the formation, which shall be, compacted to 95% BS. Compaction for a minimum depth of 150mm.

The completed surface of the formation and of other fill areas shall be within the following tolerances of the levels and gradients shown on the Drawings or directed by the Engineer.

Formation	+	0mm	- 50mm
Other fill areas	+	50mm	- 50 mm

15.1.8 Excavation

Excavation shall be carried out in a manner ensuring that the excavation plant and vehicles used do not cause rutting or damage to the sub-grade. Excavation shall be to the levels shown on the Drawings or instructed by the Engineer. Should excavation reveal sub-grade material, which is unsuitable in the opinion of the Engineer such material shall be removed and replaced by, approved fill material compacted in layers as specified.

Where instructed by the Engineer, the Contractor shall scarify the sub-grade to a depth of 150mm and the material shall be re-compacted to 95% BS. Compaction. Alternatively where so instructed he shall compact the undisturbed subgrade to 95% BS. Compaction.

The completed surface of the formation and of other cut areas shall be within the following tolerances of the levels and gradients shown on the Drawings or directed by the Engineer:

Formation	+	0mm -	50mm
Other cut areas	+	50mm-	50mm

15.1.9 Construction control testing;

All earthworks shall be subject to construction control testing. For each excavated surface and each layer of fill, the Contractor shall carry out compaction tests at the rate directed by the Engineer.

When the test results demonstrate the area of formation or fill complies in all respects with the requirements of this Specification, he shall apply to the Engineer for approval. Such application shall identify the boundaries of the area submitted and shall be accompanied by a copy of the test results. Upon receipt of an application for approval the Engineer will generally approve the area or layer submitted, but reserves

the right to order without unreasonable delay such further tests as he considers to be necessary. This procedure will be relaxed at the discretion of the Engineer as soon as the Contractor consistently achieves by his methods and plant the standards required.

15.1.10 Excavation for structures and services

Excavation shall be carried out to the line and depths shown on the drawings or to such other lines and depths as the Engineer may direct. Excavation shall be of sufficient size to enable the Works to be properly constructed. The faces and beds of all excavations shall be properly trimmed and cleaned of all loose stone, dirt or other debris. The bottom 150mm of material shall not be removed until just before placing of the blinding concrete, mass concrete foundations or bedding as the case may be. The Contractor shall report to the Engineer when a secure bottom to the excavations has been obtained and is ready for the construction of the new work, and when approval has been obtained the new work shall be constructed without delay. Any work constructed in excavations before they have been inspected and approved shall, if so directed, be removed and new work substituted after approval, all at the Contractor's expense.

15.1.11 Supports for excavations

The sides of pits, trenches and other excavations shall, where necessary, be adequately supported to the satisfaction of the Engineer by timber or by other approved means. Should slips of material occur in trenches or pits the work of re-excavating and making good shall be carried out by the Contractor at his own cost to the Engineer's approval.

15.1.12 Back-filling excavations for structures and services

Excavations shall be back-filled with approved selected excavated material or imported approved material only after the work has been measured and approved by the Engineer.

All filling shall be deposited in layers with a compacted thickness not exceeding 150mm. The material shall be compacted to 90% BS compaction for its full depth. Timber and framing shall be withdrawn ahead of the layer to be compacted, care being taken to keep the sides of the excavation solid and to fill completely all spaces left by withdrawn timber.

15.1.13 Over excavation

Over-excavation in depth and width for pavement works shall be rectified at the Contractor's expense by returning approved selected fill material and compacting to Specification.

Over excavation in depth for structures and services works shall be rectified by refilling with mass concrete but over excavation in width can be made good by returning approved selected fill material and compacting to Specification, all at the Contractor's expense.

15.1.14 Use of explosives;

Except in exceptional circumstances the use of explosives will not be permitted. However, should blasting be permitted, it may only take place at times agreed with the Engineer and the Contractor will be responsible for observing all conditions set forth in Government and Local Authorities Regulations.

Adequate warning must be given to road users and any persons in the neighbourhood when blasting is about to take place.

The Contractor shall indemnify the Employer against any claims for damages to persons or property on or near the site from any cause whatsoever arising out of the use of explosives.

The Contractor will be held solely responsible for and must immediately make good to the approval of the Engineer any damage that may occur through the use of explosives. No claim for extras whatsoever will be considered as a result of prohibition by the Public Authorities from the use of explosives.

15.1.15 Grass

Where instructed by the Engineer the Contractor will provide suitable grass and plant, water, weed, cut, maintain and deliver up the same in good condition at the end of the maintenance period. Planting should take place immediately before a rainy season and should be carried out in accordance with good horticultural practice. Areas, which do not cover or die before they are properly established should be replaced, so that all areas to be grassed are delivered up in a wholly satisfactory condition.

15.2.0 Pavement construction

15.2.1 Preparation:

Prior to the construction of each pavement layer, the previously prepared formation or layer shall be thoroughly cleaned of all foreign substances. Any ruts or soft spots which occur or any deviation from the specified tolerances or degree of compaction shall be corrected by scarifying, removing and/or adding approved material, relaying and re-compacting the unsatisfactory areas to the required density and to the required lines and levels. Should any damage occur to the formation or a pavement layer prior to the construction of the next layer, it shall be rectified to the satisfaction of the Engineer at the expense of the Contractor.

15.2.2. Alignment and level control

Stakes, boards and boning rods of substantial construction shall be furnished, set and maintained by the Contractor, in order that the works will conform to the lines and levels shown on the Drawings. The stakes shall be set at intervals not exceeding 25 metres in lines parallel with the centre line and not parallel with the centre line and not more than 25 metres apart.

Stakes, boards and boning rods shall be painted in such a manner as to indicate clearly the lines and levels to be worked to for each layer of pavement.

15.2.3 Thickness and surface tolerances:

The thickness of each pavement layer shall be such that the depths from the required finished surface levels of the pavement to the surface of each pavement layer shall nowhere be less than the depths shown on the Drawing. The surfaces of each layer other than the final layer be lower than the required surface within the tolerances stated below, provided that any such deficiency shall be made good at the Contractor's expense by increasing the thickness of the course above the surface in question.

Each layer of pavement shall be finished to a surface profile parallel to the finished surface of the pavement shown on the drawings with the level of tolerances shown below:

Variation permitted (mm)

Sub base	+	0-40	Road
base	+	0-25	
Surfacing	+	6-6	

The finished surface of all pavements shall be such that when tested with a straight edge 3 metres long placed in any position and direction, there shall not be any gap greater than 5mm between the bottom of the straight edge and the surface of the pavement. In addition to this requirement, there shall not be any deflection exceeding 10mm from a straight line between any two longitudinal points 30 metres apart. Neither of these requirements shall apply across crowns. These smoothness tolerances apply to straight profiles and equivalent smoothness tolerances shall be applied to vertical curves.

15.2.4 Gravel sub-base

The material used shall be good quality naturally occurring gravel. It shall be subject to suitable testing at the direction of the Engineer to show that it has a 4 days soaked CBR of not less than 30% at 100% BS. Compaction. The grading of the material shall show a smooth grading curve parallel to and within the limits stated below. The material shall have a Plasticity Index not exceeding 20%. The sub-base material shall be spread to the full width of the cross-section and to loose thicknesses so that after compaction the finished thicknesses will be those specified. Oversize pieces shall be removed or separately broken down. The method of compaction shall be approved by the Engineer and shall be such as to compact the material to 100% BS. compaction through its full depth. Control testing shall be carried out if directed by the Engineer.

BS. Sieve size	percentage passing		
37.5mm	100		
20mm	80-100	100	
10mm	55-80	80-100	100
5mm	40-60	50-75	80-100
2.36mm	30-50	35-60	50-80
1.18mm			40-65
600 microns	15-30	15-35	
300 microns			20-40

75 microns	5-15	5-15	10-25
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15.2.5 Gravel road base

The material used shall be best quality naturally occurring laterite or gravel from a source approved by the Engineer. It shall be subject to suitable testing at the direction of the Engineer to show that it has a 4 day soaked CBR of not less than 60% at 100% BS. Compaction. The grading of the material shall show a smooth grading curve parallel to and within the limits stated below. The material shall have a Plasticity Index not exceeding 12%.

Immediately before applying the road base, the surface of the sub-base shall in all respects comply with the specification and be thoroughly clear of all loose or foreign matter. The road base material shall be placed on the prepared sub-base by an approved method to a thickness, which on compaction will result in the thickness required. If necessary, the moisture content of the material shall be adjusted to ensure optimum compaction.

Immediately following the placing, the layer shall be compacted by approximately 16 passes of an 8 tonne pneumatic-tyred roller or equivalent passes of a vibrating or smooth-wheeled roller, to 100% BS. Compaction. Rolling shall progress from the sides to the centre of the areas under construction. Areas inaccessible to the roller shall be compacted by mechanical plate compactors. Control testing shall be carried out if directed by the Engineer.

15.2.6 Crushed stone road base:

The aggregates for crushed stone road base shall be obtained from approved sources and consist of hard, tough, heavy, compact, approved rock. After crushing it shall be roughly cubical in shape, free from flat, flakey, elongated, soft or decomposed pieces, excess dust and any dirty, acids or other deleterious substances. The rock from which the stone is to be produced shall have an Aggregate Crushing Value not exceeding 25% a Los Angeles Abrasion Value not exceeding 35% and a Flakiness Index not exceeding 30%.

The grading limits of the material shall be within and approximately parallel to curves defined by the following limits:

BS Sieve	% passing
50	100
37.5	95 – 100
20	65 – 80
10	40 – 60
5	30 – 50
1	20 – 38
0.425	12 – 24
0.075	5 – 13

Before commencing spreading and compaction the Contractor shall determine the maximum dry density and optimum moisture content of the material for each layer in accordance with BS. 1377.

Mixing, handling, transporting, placing, spreading and compacting of the crushed stone shall take place whilst it is in a moist condition and in such a manner as to avoid segregation. The Contractor shall as necessary add further water so that compaction is carried out within the range of - 2% to + 0.5% of the optimum moisture content.

The material shall be spread by means of a mechanical paver, which shall be to the approval of the Engineer and be capable of spreading the crushed stone material in an even manner without segregation to a thickness which will give the required finished thickness.

No material shall be delivered to the paver over previously compacted material. Spreading shall commence at the high point of a pavement cross-section and finish at the

low point or points. Where, in the opinion of the Engineer, segregation has occurred the material in the affected area shall be cut out and replaced.

The material shall be compacted initially with a self-propelled pneumatic tyred roller and followed by a heavy vibrating roller until all visible movement under the wheels ceases.

Any voids appearing in the surface shall be filled with crusher fines, watered and re-compacted until a hard dense layer is obtained. Compaction shall proceed from the sides to the centre of the lane under construction or from one side towards previously compacted material. The crushed stone layer shall be compacted to 100% BS. Compaction. Areas inaccessible to the roller shall be compacted by mechanical plate compactors. Control testing shall be carried out if directed by the Engineer.

15.2.7 Protection of pavement layers:

No construction traffic shall run over the exposed formation or over sub-base layers. Sub-base, or road base material where no sub-base is specified, shall be laid on the formation as soon as the last 150mm of material protecting it has been removed, in a continuous operation, and no formation shall be opened which cannot quickly be covered with sub-base or road base respectively.

The placing of the road base shall be followed as soon as practicable by the placing of the surfacing.

15.2.8 Prime coat

A prime coat shall be applied to the road base before the premix or asphalt surfacing; or surface dressing. The surface shall be thoroughly swept by brooms, all laitance, loose and foreign material removed and the clean surface of the base and hard particles in the layer exposed as a mosaic.

All loose material shall be swept well clear of the area to be primed. The surface shall be checked for line, cross-fall and level and made good as necessary and approved by the Engineer before any bitumen prime is applied. Where required by the Engineer, immediately prior to the application of prime, the surface shall be lightly sprayed with water but not saturated.

The prime coat shall be sprayed immediately after the preparation of the stone layer is completed and approved. The type of prime coat shall be medium curing cutback bitumen MC 30 grade. The rate of spray will be as directed by the Engineer between 0.5 lit/m² - 1.0 lit/m². The quantity used must give complete coverage with a slight trace of run off in places. Should the Contractor find that at the rate of spray directed

the coverage is inadequate, or there is too much run off, he shall immediately inform the Engineer and amend the spray as directed.

The prime should penetrate about 3 to 6mm and dry to a matt surface in 24 hours, leaving no pools of bitumen on the surface.

During spraying all kerbs, headwalls, drains and the like which are liable to be disfigured by splashing of bitumen shall be protected, and any such feature which is accidentally marred by bitumen, shall be cleaned with a suitable solvent or if this is not possible removed and made good at the Contractor's expense.

15.2.9 Chippings

Chippings used for surface dressing should be single sized, cubical in shape, clean and free from dust, strong, durable and not susceptible to polishing under the action of traffic. These should be selected in accordance to British Standard BS 63, "Single sized road-stone and chippings".

Samples of chippings should be tested for grading, flakiness index, aggregate crushing value and when so instructed by the Engineer, the polished stone value and aggregate abrasion value, before the start of surface dressing operation or when new supplies are delivered.

- Maximum aggregate crushing value (ACV) for surface dressing chippings should be between 20 to 35%
- Aggregate abrasion value (AAV) will be 14 for side and estate roads and 12 for highways (traffic up to 1000 vehicles /lane/day)
- Nominal size will be 6,10,14 and 70mm. "Flaky" chippings are those with thickness (smallest dimension) which is less than 0.6 of their nominal size.

15.2.9.1 The previously primed surface shall be swept clean with brooms and the debris deposited well clear of the surface to be surfaced, Any defects of the surface shall be made good as directed by the Engineer and no binder shall be applied until the surface has been approved by the Engineer.

The binder for surface dressing shall be straight run hot bitumen of grade 80/100 pen applied by a bitumen distributor complying with BS 1707 at a temperature between 145 degrees and 205°C.

15.2.9.2 Dressing

During spraying all kerbs, head walls, drains and the like which are liable to be disfigured by splashing of bitumen shall be protected, and any such feature which is accidentally marred by bitumen, shall be cleaned with a suitable solvent, or if this is not possible, removed and made good at the Contractor's expense

Immediately after the binder has been applied, clean dry stone chippings shall be spread at the rate directed by the Engineer. Directly the stone chippings have been spread they shall be rolled initially so that the whole area receives at least one pass within ten minutes of the bitumen being sprayed. Immediately after the initial rolling, any area, which is deficient in chippings, shall be made good by hand spreading. Brooming of the material to effect redistribution of chippings will not be permitted. The number of passes of the roller shall be laid down by the Engineer, but shall be at least two. A certain amount of crushing under the roller is permissible, but should

any general shattering occur, the Engineer may direct that rolling shall cease, regardless of the number of passes completed.

Pneumatic tyred rollers are preferred for rolling of all bitumen seal work though finishing with smooth steel-wheeled rollers may be permitted with the approval of the Engineer. No rollers or construction equipment shall be permitted to park on the completed work.

The road shall not be opened to traffic until the bitumen has attained sufficient viscosity to prevent stones being removed, and not earlier than 24 hours in the case of the first application of chippings.

Unless allowed otherwise by the Engineer, the area shall not be opened to works traffic before the application of the full number of specified coats.

After traffic has been permitted to run on surface dressing for a period of at least a fortnight, all loose material shall be swept to the side, collected up and disposed of. No windrow of loose chippings shall be allowed to accumulate at the sides.

15.2.10 Asphaltic concrete surfacing

Asphaltic concrete surfacing courses shall comprise a mixture of well-graded aggregate, filler and penetration grade bitumen.

The coarse aggregate shall consist of clean crushed rock, as free as practicable from flat, elongated, soft and weathered pieces and dust, dirt and deleterious matter. It shall have an Aggregate Crushing Value not exceeding 25% and Flakiness Index less than 30%. The fine aggregate may consist of stone screenings or natural sand free from clay and organic matter. The filler may consist of cement, hydrated lime or stone dust. The bitumen shall be straight run of grade 80/100 penetration. The combined grading of aggregates and filler shall show a smooth grading curve parallel to and within the limit is set out below:

BS. Sieve size	Percentage passing	
	Wearing course	Base course
14mm	80-100	75-95
5mm	54-72	52-70
2.36mm	42-58	40-56
1.18mm	34-48	32-46
600 microns	26-38	24-36
300 microns	18-28	16-26
150 microns	12-20	10-18
75 microns	6-12	6-12

Bitumen content

In addition to the above requirements both wearing course and base course material shall when compacted exhibit the following Marshall test values:

Minimum stability 250kg

flow value, between 2 - 5 mm

Control testing to ensure compliance with these requirements shall be carried out as directed by the Engineer.

The surfacing material shall be mixed in a purpose-made mixing plant of the weigh batch

or continuous mixing type in good order and approved by the Engineer, shall be transported to the works in clean covered vehicles and laid by a self-propelled mechanical

spreader/finisher without delay. The mix temperature when placed in the spreader shall not be less than 135°C. and the mix shall be rolled immediately after laying and before the

temperature falls below 120°C.

Compaction shall be by an 8 - 10 tonne smooth-wheeled roller of roll width greater than 450mm or by pneumatic-tyred roller of equivalent mass. The material shall be rolled from side to centre in a longitudinal direction. Cold joints shall be formed on a new cut vertical face and painted with hot bitumen. Rolling shall continue until all roll marks are eliminated and 98% of the laboratory density is obtained. Rollers shall not stand on newly laid surfacing.

15.2.11 Kerbs, edgings and quadrants

Kerbs, edgings and quadrants may be supplied in precast concrete to BS. 340 or dressed hard stone to the approval of the Engineer. In the latter case, kerbs will be accepted without batter and in random lengths. They shall be bedded and haunched in concrete and the joints are to be pointed in 1:3 cement mortar. The price is to include for excavating; supplying; laying (to radius of required), jointing and back-filling and all materials necessary for completion.

15.2.12 White line markings:

White line markings where specified shall be painted in long life chlorinated rubber road marking paint.

16.0 ELECTRICAL INSTALLATION

16.1 TECHNICAL SPECIFICATIONS I

16.1.1 General Conditions

The Contractor shall use a qualified approved electrician to perform the Electrical works i.e. the Main Contractor is allowed to sublet electrical installation part to approved Electrical Contractor as domestic Sub-contractor.

This specification is to be read in conjunction with "General Conditions of the contract" and any general or particular specification and drawings listed in section six of this bidding documents.

Minor details not shown or specified herein but necessary for proper installation and operation shall be included in the Contractor's estimates.

Any apparatus, appliances, material or work not shown on drawings but mentioned in the specification or vice versa, or any incidental accessories necessary to make work complete and perfect in all respects and ready for operation, even if not particularly specified, shall be furnished delivered, and installed by the Contractor without any additional expense to the employer.

With submission of bid, the contractor shall give written notice to the Engineer of any materials or apparatus believed inadequate or unsuitable, in violation of laws, regulations, and any necessary item(s) or work omitted. In the absence of such notice, it is mutually agreed that the Contractor has included the cost of all required items in his proposal, and that he will be responsible for the approved satisfactory functioning of the entire system without extra compensation.

16.1.2 Contractor's Conditions

The Contractor's conditions of sale or contract shall not stand against nor invalidate this specification.

16.1.3 Statutory Regulations.

All work shall be carried out in accordance with the requirements of the current edition of the 'Regulations' for the Electrical Equipment of Buildings issued by the Institution of Electrical Engineers. In the specification references to the I.E.E. Regulations are to the 17th Edition.

16.1.4 Symbols

Symbols used on the drawings shall have the meanings assigned to them according to the accompanying legend or the legend of a drawing with reference as directed by the Notes.

16.1.5 Materials & Equipment

Materials and Equipment shall be of first quality and approved and shall comply with the specification of the British Standards Institution where relevant at the date of contract. The Contractor shall, if so required, submit samples of all materials and equipment for approval if those material are those not specified in the Bills of Quantities.

Where the material and / or equipment is specified in the Bills of Quantities followed by approval equal, it is so named or described for the purpose of establishing standard of materials and workmanship to which the Contractor shall adhere. Should the Contractor install the material or method in question before receiving approval from the proper authorities the Engineer shall at his discretion direct the Contractor to remove the materials in question immediately. The fact that this material has been installed shall have no bearing or influence on the decision by the Engineer. All equipment shall be fully tropicalized.

16.1.6 Builder's works

The Contractor shall be responsible for the supply and correct positioning of all fittings and supports and shall be required to mark out all holes and chases, but the cutting away, grouting-in and making good shall be the responsibility of the Contractor to ensure that all the builders work is carried out to the requirements of the various parties concerned, e.g. TANESCO, etc.

16.1.7 Cooperation with other trades

The Contractor shall give full cooperation to other trades and shall furnish any information necessary to permit the work of other trades to be installed satisfactorily and with least interference or delay.

Where the Electrical work will be installed too close to work of other trades, or in manner evidently to interfere with the work of other trades, he shall assist in working out space conditions to make a satisfactory adjustment. If the Contractor installs his work before coordinating with other trades or so as to cause any interference with work of other trades, he shall make necessary changes in his work to correct the condition without extra charge.

The variation between equipment manufacturers requires complete coordination of all trades. Therefore the Contractor, who offers, for consideration, substitute or equal products of reliable manufacturer, has to be responsible for all changes that affect his installation and the installation of equipment of other trades.

16.1.8 Setting out and final position of electrical gear

The Contractor shall be responsible for all site measurements with respect to the setting out his own works such Builder's works as may be necessary for others to execute.

All drawings shall be read in conjunction with the latest Architect/Engineerural, Structural, and Services drawings available on site prior to commencing work at all stages of the work. Special attention shall be paid to areas where the electrical gear must be placed in relation to benches, working tables, wall units, cabinets, wall tiling, patterned walls or ceiling, kitchen areas, etc.

Where wiring and conduit runs are indicated diagrammatically the exact position shall be agreed upon with Engineers on site.

The Contractor shall include for a position variations of 0.5 metre from that of any items shown. Where symmetry is the determining factor for the positions the reference points or lines shall be measured as accurately as possible.

The Electrical Contractor shall maintain accurate records of all deviations in work as actually installed from work indicated on the drawings, on completion of the project, or when requested by the Engineers the Contractors shall deliver two (2) complete sets of prints to the Engineers.

16.1.9 Access to plant rooms

It shall be the responsibility of the Contractor to ensure that all equipment ordered in respect of contract is to be contracted in such a manner that it may, if necessary be dismantled to enable it to pass down through the building to street level. He shall also ensure that the systematic installation of plant room equipment is planned so that the largest items of equipment can be installed.

16.1.10 Distribution boards and switch gear

Where applicable the switchboards shall be of the type and size specified in this specification or Bills of Quantities but care should be taken if the manufacturer offers the latest version of the type specified that the differences do not affect the Design. If such change occurs, the Contractor shall provide all the drawings and specifications as supplied by the Manufacturer, for the new version to the Engineers for approval before ordering/installing the equipment.

The location of Distribution Boards (DB) shall be as specified herein or in the drawings. Where two or more DB's is shown on the drawings the Contractor shall prepare drawings indicating his proposed arrangement details prior to proceeding with the installation.

The Neutral bar of each S.P.N. and T.P.N. fuse or Miniature circuit Breakers (MCB) irrespective of the outgoing circuit shown shall have same sequence as the phase cables are connected to the M.C.B's. This shall apply to earth bars when installed.

The following refers to M.C.B. Distribution Boards:

- The spare ways not showing current ratings will be fitted with removable blanking plates and accessories for future breakers.
- If spare ways shows current ratings then breakers must be fitted.

16.1.11 Cables

All cables used in Contract shall be manufactured in accordance with the current appropriate BS Specifications, which are as follows:

Rubber Insulated cables and flexible cords B.S.S. 6500

P.V.C. Insulated cables and flexible cords B.S.S. 6004

P.V.C. Insulated Armoured cable B.S.S. 6346

Butyl Rubber Insulated cables B.S.S.D. 6101V

The Contractor will, at the Engineer's discretion, be required to submit samples of cables for the Engineer's approval: The Engineer reserves the right to call for cables of an alternative manufacturer without any extra cost being incurred.

No cable of C.S.A. less than 1.5 mm² shall be used unless otherwise specified.

16.1.12 Armoured P.V.C. Insulated and sheathed cables

Shall be 600/1000- volt grade with standard copper conductors. The wire armour of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armour shall not be more than twice that of the largest current carrying conductor of the cable.

Where cables enter Switchgear and other apparatus, they shall be made off with proper glands for this type of cable, with the whole gland enclosed in a P.V.C. shroud.

When lugs are soldered to cable ends any exposed conductor shall be taped with a P.V.C. Tapes to thickness of the original insulation, the taping being taken partly over barrel of the cable lug. The colour of the tape shall be the same as the original insulation.

Where cables rise from floor level to Switchgear, etc. they shall be protected by P.V.C. conduit to a height of 600mm from the finished floor level, whether the cable is to run on the surface or recessed into the wall.

All P.V.C. S.W.A. cables run inside the building shall be fixed in rising ducts or on ceiling by means of diecast cable hooks or clamps, of appropriate size to suit cables, fixed by studs and back nuts to their channel sections, Type C.S.I. Alternatively by B.I.C.C. claw type cleating system with diecast cleats and galvanized mild steel back straps or similar approved equal method for one or two cables runs together, the cleats shall be fixed to special channel section supports or back straps described above, which shall in turn be secured to walls or ceilings of ducts by rowbolts.

Where armoured cables are run outside the buildings they shall be laid underground with protecting concrete interlocking cover tiles laid over, which shall be provided and laid under this Contract. All the excavations and reinstatements of ground will be carried out by the Main Contractor also the Contractor shall be responsible for sanding of the trenches on top of which he shall lay the cables.

Depth of laying low voltage cable shall be 450mm minimum but 600mm to the top of cable tiles where planting is indicated on the drawing.
Any damage to the serving or sheathing of cables shall be brought to the Engineers notice in writing and their instructions that it should be repaired or replaced is to be carried out.

16.1.13 P.V.C insulated cables

These cables shall be of the non braided type as C.M.A reference 6491x600/1000 volt grade cables, or equal approval cables for all service shall be in accordance with the schedules and the Electrical Regulations.

16.1.14 Heat resisting cable

Final connection to all lighting fittings (and other equipment where a temperature in excess of 65 °C is likely to be experienced) shall be made using silicone rubber insulated cable or equal approved.

16.1.15 Conduit installation

Conduit shall be Heavy gauge P.V.C. or steel as specified in the Bills of Quantities, of 20mm minimum diameter and made to applicable B.S.I. standards. Steel Conduit and fittings shall black enamel finish, unless otherwise specified for indoor use and outdoors-galvanised finish shall be used.

Cable capacity of conduit shall be in accordance with the appropriate tables of I.E.E. Regulations and sufficiently large to allow easy draw in or withdrawal of any one or all cables. A conduit run shall neither have more than two (2) right angle bends or equivalent nor more than 10m without the provision of a draw in box.

Conduit shall be installed in such a way that there is segregation of lighting, general-purpose power installations telephone, alarm systems etc. as outlined in the Regulations.

In poured, reinforced concrete columns and slabs the fitting and boxes shall be laid and fixed in position to prevent displacement during mechanical vibration, and shall be sealed to prevent the ingress of cement.

Conduits installed on surface shall be unobtrusive and runs shall be symmetrical and in keeping with the building design. The routes of all surface conduits shall be approved by the Engineer and/or Architect/Engineer on site before installation.

The crossing of expansion joints and feeders to work benches from floors shall be made with flexible conduit connecting each end of the P.V.C. conduit, care shall be taken to ensure that the flexible conduit/conduit connector are correctly installed and will not become disconnected when the expansion and contraction takes place.

Where permanent wiring is not installed a draw wire shall be left in all such conduits.

16.1.16 Labelling

All main switches, circuits breakers, isolators and distribution boards shall be labelled showing the area and service fed them, and where not otherwise immediately obvious, their source of supply.

The circuits fed from the DB shall be marked on a card fixed to the inside of the lid or as shall be agreed with the Engineers. The card must indicate without ambiguity the location of all the outlets fed from each distribution way and the size of the fuse or circuit breaker rating.

All control switches, isolators, starters, etc, shall be labelled to indicate the item or apparatus controlled, the supply voltage and phase.

Where socket outlets and/or single phase isolators in any one room area are connected to more than one phase, all such outlets and isolators shall be labelled to indicate the phase to which they are connected and where required by the Engineers, a warning label shall be provided and fixed as directed to indicate the presence of 415 volts between outlets on different phases.

16.1.17 Final sub-circuits

The wiring of each final sub-circuit shall be electrically separated from that of every other final sub-circuit. For all lighting and socket outlets wiring shall be carried out in the "Looping in" system, and there shall be no joints whatsoever.

The wiring sizes for lighting circuits and socket outlets are shown on the drawing. If not shown then the sizes specified in I.E.E. Regulations shall be assumed.

16.1.18 lighting fittings

The Contractor shall supply and fix all lighting fittings and lamps of number, and size indicated on the drawings manufactured and designed to comply with BS 4533/EN 60598. Fittings shall be assembled and cleaned and if necessary any suspension tubes cut and screwed to provide the right mounting height.

All fittings and pendants shall be fixed to conduit boxes with brass R/H screws. The whole of the metal work in each lighting fittings shall be effectively bonded to earth. In case of ball and/or knuckled joints, short lengths of flexible cable shall be provided bonded to the metal work on either side of the joints. Where lamp holders are supported by flexible cable, the holders shall have "cord grip" arrangement, and in case of metal shades earthing screws be provided on each of the holders.

In case of rectangular shaped ceiling fittings, the extreme ends of the fittings shall be secured to suitable support in addition to central conduit box fittings.

16.1.19 Electric lamps

All lamps shall conform with the specifications of the appropriate B.S.I. suitable for normal stated supply voltage.

Prior to installation, the Contractor shall enquire of and conform to the direction of the Engineers as to the colour of fluorescent lamps to be installed.

16.1.20 Switches

Switches shall be of the type(s) given in the Schedule of Materials/Bills of Quantities of this specification, and shall conform to BS 3676. Steel flush mounting boxes for switches shall conform to BS 4662.

Where multi-gang switch assemblies are used the switches shall be connected so that their layout relative to each other on the switch-plate conforms, as far as practical, to the layout of the groups of appliances controlled.

Generally switches shall be mounted at a height of 1400mm above finished floor level, and 150mm from the doorframe.

16.1.21 Socket outlets

Socket outlets for general A.C supplies shall be 13 Ampere complying with BS 1363 and of the type specified in the Schedule of materials/Bills of Quantities. Flush and surface mounting boxes for sockets outlets shall be designed and manufactured to comply with BS4662 and BS 5733 respectively.

Unless otherwise specified, socket outlets shall be mounted 300mm above finished floor level except those on top workbenches, which shall be, installed as detailed drawings.

Where two or more points are shown adjacent to each other on the drawing, e.g. socket outlet and telephone outlet, they shall be lined up vertically or horizontally on the centre lines of the units concerned.

Normally the units shall be lined up on vertical centre lines, but where it is necessary to mount units at low level they shall be lined up horizontally.

16.1.22 Telephone outlets

Telephone outlets shall be installed in preparation rooms as shown in the drawings.

Final wiring for the telephone system shall be carried out by others, however the Contractor shall lay conduits and draw wires as outlined in the drawings.

16.1.23 Fume Cabinets

Fume cabinets and similar apparatus shall be controlled either by local switch of suitable rating fitted with a neon indicator connected in a radial circuit.

Final connections to the cabinets shall be by butyl rubber silicone rubber or other approved heat resisting cables run in flexible conduit, which shall commence at flush circular conduit box situated beside the equipment.

16.1.24 Earthing

The Contractor shall be responsible for providing and installing all necessary electrodes, earthing conductors; clamps; connectors and to ensure that the entire installation is installed in accordance with the I.E.E. Regulations. Earth plates shall not be permitted.

The Earth resistance shall be tested in the manner described in the latest edition of the I.E.E. Regulations by the Contractor in the presence of Engineer, and the Contractor shall be responsible for the supply of all test equipment.

An Earthing Terminal must be provided at each box or other enclosure to which accessories are to be attached. The earth leads to each distribution board shall not be less than half the cross sectional area of the feeder.

16.1.25 Testing and inspection

On completion of the entire installation or as may be deemed necessary by engineer, the Contractor shall test all wiring and connections for:

- Earth continuity
- Neutral Earth loop impedance
- Insulation Resistance
- Earth Resistance

All tests shall be in accordance with the Electrical Regulations

In case power is not connected at the time of handover the Contractor shall ensure that a suitable generator set is availed for the purpose of completing the tests. All related costs shall be borne by the Contractor.

The Contractor shall provide the Test Certificates which must be set out as indicated in the Electrical Regulations with additions where necessary to include functional tests and other tests, and shall be signed by the Engineer who shall be present at all site tests.

All the apparatus, attendance and assistance necessary, together with all skilled labour, shall be provided by the Contractor.

The Contractor shall advise the Engineers of a suitable date for the final inspection, which shall be prior to the date of handover of the Main contract. This shall be after:

- All boards Switchgear, outlets etc., have been cleared and damaged paint work made good.
- All lamps are in-situ and working
- All tests described above have been carried out and certificates produced.

- All labelling has been completed
- All conduit lids are secured
- All unused blanking holes have been blanked off
- All builder's work has been made good round outlets etc. to the Engineers satisfaction and all surplus paint cleaned off on items of electrical equipment.

Any faults defects, or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation made apparent by such inspections or tests, shall be rectified by the Contractor at his own expense.

16.2.0 TECHNICAL SPECIFICATIONS II

16.2.2 Main switch

Location of main distribution board as shown in drawings is for tendering purposes only. The Engineer shall decide actual position on site after determining the exact mains entry point.

16.2.3 Distribution boards

Distribution boards shall be installed at positions and height shown on drawings.

All breakers and other apparatus shall only be accessible through the door, only incorporated isolators shall be accessible from outside.

Typewritten or stenciled labels showing each circuit shall be fixed on the inside of the door.

The circuits of the DB's shall have phase arrangement in accordance with that shown on the diagrams. However it shall be the responsibility of the Contractor to test the load to the satisfaction of the Engineer.

16.2.4 Wiring system

All internal wiring shall be carried out in PVC insulated single core cables run in non-metallic conduits either concealed in chases cut in solid partition walls, or cast in-situ in concrete structure or fixed on the surface of walls or ceiling member shall be fixed by spacer bar saddles fixed not more than 1 meter apart.

The Contractors shall install PVC pipes to accommodate the supply cables into and out of the building as proposed on drawings.

16.2.5 Fittings and accessories

Type and makes of fittings and accessories have been specified in the bills of quantities. The specifications are meant to ensure a good standard of quality of materials. Any other fittings must first be inspected and approved before being used.

16.2.6 Installation of boxes for accessories

All boxes shall be of metallic type.

The installation of boxes shall be made with great care and they shall be set plumb and true. Care shall be exercised to ensure that outlet boxes are set flush with wall finish so that cover plates will neither protrude beyond the surface of the wall nor be sprung out of shape by the outlet box being set too deep in the wall.

16.2.7 Builders work

The Contractor shall take special care in the location of conduits so that same will not clash with required locations for and proper grading of water, drain pipes etc, and he shall take special pains to refer to the drawings covering such requirement so as to ensure his equipment is installed in proper relation to other apparatus.

16.2.8 Earthing

Earthing shall be done as recommended in IEE Regulations for Electrical Installation of Buildings. Each unit shall have its own earthing points consisting of an earthing inspection chamber and copper electrodes.

16.2.9 Final testing and inspection

On Completion of the entire installation and before handover, inspection shall be carried out as given in part I of these specifications.

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2. Form of Tender

07 January, 2022

To:

District Executive Director,
Mpwapwa District Council,
P.O.Box 12, Dodoma.
Tanzania.

1. We, **AZHAR CONSTRUCTION COMPANY LTD** of P.O.BOX 35918 Dar es salaam, offer to execute **Construction of intensive Care Unit (ICU) at Mpwapwa District Hospital, Tender no. LGA/023/2021-22/HQ/W/116.** in accordance with the Conditions of Contract accompanying.

This Tender for the Contract Price of **TZS 248,191,642.00/=VAT Inclusive** (Tanzania shillings)

The Contract shall be paid in the following currencies: (ONLY IN TZS)

Currency	Percentage payable in currency	Rate of exchange: one foreign equals [insert local]	Inputs for which foreign currency is required
(a)	100%	N/A	N/A
(b)		N/A	N/A

The advance payment required is:-

Amount	Currency
(a) 37,228,746.30	TZS
(b)	TZS

We declare that our tendering price did not involve agreements with other tenderers for the purpose of tender suppression.

We hereby confirm National Construction Council, to be the Appointing Authority, to appoint the adjudicator in case of any arisen disputes in accordance with ITT 43.1 [Adjudicator]



We are not participating, as tenderers, in more than one Tender in this tendering process other than alternative tenders in accordance with the tendering documents.

We declare that, as tenderer(s) we do not have conflict of interest with reference to ITT 3.7 [Eligibility of Tenderers]

With reference to ITT 3.11 [Eligibility of Tenderers], it is our intention to subcontract approximately [insert the percent] percentage of the Tender /Contract Price, details of which are provided herein.

Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the contract has not been declared ineligible by the Government of the United Republic of Tanzania under Tanzania's laws or official regulations or by an act of compliance with a decision of the United Nations Security Council.

The following commissions or gratuities of fees have been paid or are to be paid by us to agents relating to this tender, and to contract execution if we are awarded the contract:-


Name and address of agent or recipient	Amount and currency	Purpose of commission or gratuity
NONE	NONE	NONE

(if none has been paid or is to be paid, state "none")

This tender and your written acceptance of it shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Tender you receive.

We hereby confirm that this tender complies with the tender validity and Tender Security required by the tendering documents and specified in the Tender Data Sheet.

Authorized Signature: 

Name and Title of Signatory: SALIM SALEHE RWEKANA RA (Company SECRETARY)

Name of Tenderer: AZHAR CONSTRUCTION CO. LTD

Address: P.O. Box 3591



PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT



BILL OF QUANTITIES FOR THE PROPOSED CONSTRUCTION OF
INTENSIVE CARE UNIT BUILDING

November, 2021



EDGAR G. MADOEN
District Engineer Works
MPWA
2/12/2021

GENERAL SUMMARY

GENERAL DESCRIPTIONS	AMOUNT
BILL No 01 - PRELIMINARIES 8,200,000.00	10,000,000
BILL No 02 - SPECIFICATIONS	-
BILL No 03 - MEASURED WORKS (ICU BLOCK) 206,412,200.00	188,231,900
BILL No 04 - PRIME COSTS AND PROVISIONAL SUMS	9,100,000
SUB-TOTAL 223,712,000.00	207,331,900
INSURANCE CLAUSES:	
· Clause 13 - Contractor to maintain in joint names of the Employer and Contractor, Insurance Against Loss and Damages to the works by fire, earthquakes, etc.	1,500,000
· Clause 54 - Performance Security	1,500,000
SUB-TOTAL (1)	210,331,900
ADD: 18% Value Added Tax (VAT) 40,808,196.00	226,712,200.00
SUB-TOTAL (2)	37,859,742
	248,191,642
AMOUNT CARRIED TO FORM OF TENDER TShs.	248,191,642


Signed by SALAM PUECRASIRA For and on behalf of 267,520,396.00 ASTAR CONSTRUCTION CO. LTD

In the capacity of DIRECTOR made this 02 day of JAN 2021

NOVEMBER 2021

GS/1


PO-RALG

ITEM	DESCRIPTIONS OF WORKS	TSHS.
	DESCRIPTION OF SITE:	
A.	The site is located District/Councils WITHIN TANZANIA COUNTRY	
B.	The Contractor shall provide and maintain any necessary temporary roads; sleeper tracks; and temporary cross over during the execution of the works; clear away the same at completion and reinstate and make good any work disturbed to the satisfaction of the Local Authority and the Employer.	
C.	The Contractor shall be deemed to have visited the site and satisfied himself as to: <ul style="list-style-type: none"> i) The nature of the site ii) The amount of bush; rubbish or debris to be cleared away before commencement. iii) The nature of proximity and size of adjoining building and property. iv) The nature of existing communications by roads or otherwise. v) The means of access to the site. vi) The availability of land for the erection and positioning of all temporary structures; plant and materials necessary for the execution of the works. vii) The source of adequate supplies of labour, plant and materials for the completion of the works. 	
D.	If the Contractor wishes to execute trial holes before submitting his tender; he may do so in positions to be agreed with the Employer and at his sole expenses; including the reinstatement of the ground if so required by the Employer.	
E.	The whole of the site will be available to the Contractor immediately upon the issue of the order to commence.	
F.	Any sand; aggregate to or other building materials shall be the property of the Employer and shall not be used in the construction of the works without the written consent of the Employer.	
G.	The Contractor is to satisfy himself as to any difficulties that the site may present and to make all necessary enquiries to any point which in his opinion requires further elucidation as no claim for lack of information on any of the above will be entertained.	
		
	COLLECTION TSHS.	

NOVEMBER 2021

8/1/2

EDGAR G. MADENIA
 Attested
 ASSESSOR ENGINEER WORKS
 M.P.W.A PWA PORALG
 21/12/2021

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<p>DESCRIPTION OF WORKS: The work within this contract comprises of: <i>Substructure, Frames, Walls, ramp, Stairs, Roof, Doors, Windows, Service Engineering, Finishings, Decorations and External Works on Construction of Intensive Care Unit Building</i></p>	
B.	<p>SINGULAR AND PLURAL Word importing the singular only also includes the plural.</p>	
C.	<p>LAW GOVERNING CONTRACT The contract shall be in all respect to be constructed and operated in accordance with the law of Tanzania.</p>	
D.	<p>METHOD OF MEASUREMENT: These Bills of Quantities have been prepared in accordance with the standard method of measurement of Building Works for East Africa first edition (metric) published by the architectural association of Kenya chapter of Quantity Surveyor Act, 1970; and applied equally to the measurement of proposed works and of variations by Quantity Surveyors.</p>	
E.	<p>Variation of 'Builder's Work' will be subject to the same amended rates of percentage of adjustment.</p>	
F.	<p>DEFINITIONS OF ABBREVIATIONS: The Contractor should take due notice of the under mentioned abbreviations:</p> <ul style="list-style-type: none"> mm - millimetres cm - centimetres M³ - cubic meters M² - square metres M - linear metres No - Number Kg - Kilograms P.C - Prime cost 	
G.	<p>The Contractor shall allow for keeping all records appertaining to the work and shall keep on the site a daily diary recording weather conditions; temperature; visitors to the site, etc.</p>	
H.	<p>The Contractor is to supply to the Employer such information as he may be required in connection with the work; including statement showing the number of men employed in all trades daily; and delivery notes (stating the name of the project) for all materials delivered to the site.</p>	
TO COLLECTION TSHS.		

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	EMPLOYER'S INSPECTION: No work shall be covered up until it is inspected and approved by the Employer.	
B.	The Employer may at any time before the end of defects liability period or during any extended time where any defect are being made good, instruct the Contractor himself as to the quality of materials or workmanship used. If in the opinion of the Employer such parts are not in strict accordance with the contract documents he may order the Contractor to remove all defective work, replace with approved materials and reinstate any such part of the works and any other disturbed at his own expenses and to the entire satisfaction of the Employer. If any such parts of the works are found to be in accordance with the contract documents the Contractor will be reimbursed with the General conditions of contract.	
C.	DISTURBANCE OR NUISANCE: The Contractor shall allow for taking all necessary precautions in the order and execution of the work so as to avoid causing disturbance or nuisance to the occupants of existing buildings and those adjacent to the works and for complying with the Employer's instructions in this respect. The Contractor shall be in tort for such nuisance and shednets.	
D.	TRESPASS, DAMAGE AND CARE OF WORKS: The Contractor shall prevent any trespass on the opinion adjoining property and he shall take all reasonable precautions during the progress of the contract to prevent any damage to the adjoining property or plant or private roadways and to prevent material, plant, rubbish and debris, etc. collecting on the adjoining property or roadways.	
E.	Should the Contractor wish to erect scaffolding or to make use of adjoining property; he shall obtain prior permission from the Employer and clear away at a completion of his work or when directed and make good any damage to his satisfaction. Except as provided for in the General conditions of contract; the Contractor; shall be held responsible for the care of works generally until their completion; including all works executed and materials deposited on the site by himself or his Sub-Contractors or supplier together with all risks arising from weather; carelessness of operatives; damages and he shall make good all such damage or loss at his own expense	
F.	The Contractor shall be responsible for the protection of any adjacent building; boundary walls; fences; services either overhead or underground and for the making good of or paying for all damage thereto; should such be caused in the course of building operations.	
G.	The Contractor shall allow for making good all damage to the road; kerbs; surface water channels; etc. occasioned by heavy traffic; delivery of materials and building operations generally to the entire satisfaction of the Employer and shall be responsible for observing any by law of Local Authority regarding keeping the road free from mud; filth dirt; etc. out of the execution of the works.	
TO COLLECTION TSHS.		C



NOVEMBER 2021

8/1/4

EDGAR L. MADEIRA
 DISTRICT ENGINEER WORKS
 21/12/2021
 PO-RALG

3

06/01/2022

06/01/2022

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<u>PROTECTION FROM THE WEATHER:</u> The Contractor shall allow for covering up and protecting all new work from injury by weather or any other cause. Any damage, loss or expense caused by non-compliance with the clause shall be at sole risk of the contract.	
B.	<u>TOOLS, PLANT AND SCAFFOLDING:</u> Provide all necessary cranes, hoists, concrete mixer and other plant including ladder, staging, access gangways tackle, tarpaulins, tools, moulds templates and other requisites necessary for proper executing, adapting from time to time as may be necessary and maintain all plant and equipment during the course of the contract.	500,000
C.	The Contractor shall allow for providing adapting from time to time as may be necessary and maintaining all scaffolding scaffold boards and temporary staging, etc, necessary for the execution of the works.	
D.	The Contractor is to provide everything necessary for the proper execution of the works according to the true intent and meaning of the drawings; etc, whether the same may or may not be particularly shown on the drawings; specifications provided that the same is reasonably to be inferred there from.	
E.	<u>SITE ACCOMODATION:</u> The Contractor shall provide and maintain any necessary temporary office accommodation required by himself and his Sub-Contractors suitably equipped with desks; chairs; drawing boards; and electric lighting and telephone.	
F.	The Contractor shall provide and maintain for his workers latrine facilities washing and drinking water, first aid equipment's and shelters equipped with tables; benches and checking facilities all to the reasonable satisfaction of the workers and approved by the Employer and Health Authorities.	
G.	The Contractor shall provide and maintain any temporary storage, shed or buildings which in his opinion are necessary for himself and his Sub-Contractors for the execution of the works.	
H.	<u>WATER FOR THE WORKS</u> The Contractor shall allow for all necessary clean fresh water for the works, including that required by Sub-Contractors and for any temporary plumbing metres and storage facilities and pay all charges in connection therewith and clear away on completion and make good works disturbed.	100,000
J.	The Contractor shall allow for providing and maintaining a temporary electricity supply for the works including that required by Sub-Contractor and for any meters and fittings to give artificial lighting and power necessary for the execution of the works and pay all charges, in connection and make good all works disturbed.	
TO COLLECTION TSHS.		6,000,000

NOVEMBER 2021

06/07/2022

06/07/2022 8/1/5

PO-RALG

ITEM	DESCRIPTIONS OF WORKS	TSHS.
A.	<u>WATCHING AND LIGHTING:</u> The Contractor shall allow for providing and maintaining any barriers; hoarding; watching; lighting which must comply with the By-laws of requirements of the Local Authority and policy regulations and the Contractor must give all requisite policies to those authorities and provide everything necessary to protect the general public workmen; plant; materials and the whole of the works	200,000
B.	No advertisement will be permitted without the written authority of the Employer.	
C.	<u>SIGN BOARD:</u> The Contractor shall provide and erect a large sized sign board on the site showing the title of the contract, the name and address of the Employer; consultant, nominated suppliers and Sub-Contractor and such information as may be required by the Employer who shall provide the sign layout and colours of the Board. The board shall be repainted when necessary and removed when no longer required.	200,000
D.	<u>PROTECTION:</u> The Contractor is required to protect works section until completion.	
E.	<u>TESTING:</u> Allow for testing all the installations required to be tested and provide everything necessary for this purpose and leave the whole in perfect working order to the satisfaction of the Employer and Local Authority.	—
F.	<u>REMOVING RUBBISH AND CLEANING:</u> The Contractor shall make good all defects and injuries to the works, clean down external faces wash off stains to face work, clean off marks mortar and cement, clean windows inside and out, scrub floors, flush drains run and leave all parts of the works clean, free from rubbish and waste materials and perfect on completion.	—
G.	The Contractor shall clean and cart away all rubbish as it accumulate and keep the works in orderly condition to the satisfaction of the Employer	—
	TO COLLECTION	* 4,000,000
	<u>COLLECTION</u>	—
	Page No. 8/1/1	—
	Page No. 8/1/2	—
	Page No. 8/1/3	—
	Page No. 8/1/4	6,000,000
	Page No. 8/1/5	4,000,000
	BILL No. 01 PRELIMINARIES CARRIED TO GENERAL SUMMARY	* 10,000,000

NOVEMBER 2021



8/1/6

EDGAR G. MADIMLA

PO-RALG

H. K. K. K.

AGPE

21/12/2021 PWA

WORKS

06/01/2022

06/01/2022

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
BILL NR. 3- MEASURED WORKS					
ELEMENT NO. 1 - SUBSTRUCTURE					
EXCAVATION AND EARTHWORK					
A	Site clearance of small trees, shrubs and the like including grubbing up roots	436	m ²	1000	436,000
<u>Excavating</u>					
B	Surfaces to reduce levels average 150mm deep vegetable soil and remove from site	436	m ²	1200	523,200
<u>Trenches in natural ground; to receive foundations; starting from reduced level</u>					
C	Not exceeding 1.50 meters deep	99	m ³	7000	693,000
<u>Pits; to receive foundations; starting from stripped level</u>					
D	Not exceeding 1.50 meters deep	13	m ³	7000	91,000
E	Extra over all kinds of excavations irrespective of depth for breaking up rock	1	m ³	19000	19,000
F	Backfilling depositing and compacting in layers maximum 150mm thick imported materials around foundation	48	m ³	12,000	576,000
G	Remove away from the site surplus excavated materials	64	m ³	10,000	640,000
<u>Disposal of water</u>					
H	Keeping all excavation free from all water by pumping, bailing or others means necessary including spring or running water				
<u>Plunking and Strutting</u>					
J	Allow for provision and subsequent removal for plunking and strutting to uphold and maintain all forces of excavation		Item	200,000	200,000
			Item	200,000	200,000
<u>To Collection</u>					2,369,200

10VEMBER 2021

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3/1/7

Mw. V. J. ...

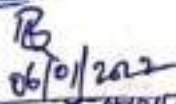
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	<u>Filling</u> Sand filling in making up levels; average 200 mm thick	41	m³	15,000	615,000
	<u>Hardcore and the like</u>				
B	150 mm thick beds; levelled compacted and blinded to receive damp proof membrane	325	m²	10,000	3,250,000
	<u>Soil Sterilization</u>				
C	Chemical anti termite treatment around the building plinth	99	m	1500	148,500
D	Aldrin solution applied at a rate of 7 litres per square metre	325	m²	1500	487,500
	<u>Concrete works</u> <u>In situ concrete plain grade 10' mix ratio (1:4:8)</u>				
E	50mm Thick blinding	8	m²	13,000	104,000
	<u>Plain in-situ concrete; grade 15N/sq.mm nominal mix (1:3:6)</u>				
F	100mm Bed	325	m²	10,000	3,250,000
G	Ditto to Ramp	30	m²	25,000	750,000
H	Steps	1	m²	250,000	250,000
J	Strip foundation	18	m³	250,000	4,500,000
	<u>Vibrated Reinforced in-situ concrete; grade 20 nominal mix (1:2:4)</u>				
K	Column bases	4	m³	260,000	1,040,000
L	Plinth beam	9	m³	260,000	2,340,000
M	Columns	1	m³	260,000	260,000
	<u>Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent</u>				
N	16mm Diameter bars	508	kg	3100	1,574,800
P	12mm Diameter bars	280	kg	3100	868,000
Q	8mm Diameter bars	312	kg	3100	967,200
To Collection				20,405,000	20,465,000

NOVEMBER 2021





06/01/2022



EDGAR K. MADEMBO-RAIG
 District Engineer Works
 21/12/2021
 4/1/22

COUNCIL HOSPITALS		INTENSIVE CARE UNIT BUILDING			
ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	<u>Sawn formwork to</u>	8	m ²	20,000	160,000
A	Vertical sides of columns;	78	m ²	15,000	1,178,000
B	Vertical sides of plinth beam				
C	Vertical edge of bed, and the like over 75mm but not exceeding 150mm high	77	m	4000	308,000
D	Ditto to Ramp edge ditto	13	m	4000	52,000
E	Ditto to Steps 150mm high	12	m	4000	48,000
	<u>Walling</u>				
	<u>Concrete block B.S 2028 type A: 3.5N per square millimetre; solid in cement sand mortar (1:4)</u>				4,242,000.0
F	230mm Thick wall	101	m ²	42,000	42,000
	<u>Damp-proof Courses (DPC)</u>				
G	230mm Wide Hessian based bitumen laid horizontally on solid blockwork	131	m	2000	262,000
	<u>Damp-proof Membrane (DPM)</u>				
H	500Gauge polythene sheet laying on blinded hardcore with 150mm sides and end laps	325	m ²	2800	915,000
	<u>Sundries</u>				
J	12mm Cement and sand (1:3) external rendering to concrete block wall	50	m ²	4000	200,000
K	Prepare and apply two coats of black bituminous paint on rendered or concrete surfaces, externally	50	m ²	4000	200,000
	<u>To Collection</u>				3,976,000
	<u>COLLECTION</u>				
	Page 2/1/1				3,269,000
	Page 2/1/2				29,405,000
	Page 2/1/3				3,976,000
	<u>ELEMENT NO. 1 - SUBSTRUCTURE CARRIED TO SUMMARY</u>				
				31,522,200	27,750,200

NOVEMBER 2021

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PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO. 2 - FRAME					
<u>Concrete work</u>					
<u>Vibrated Reinforced in-situ concrete; grade 20 nominal mix (1:2:4)</u>					
A	Beams; horizontal or sloping not exceeding 15 degrees from horizontal	11	m³	260,000	2,860,000
B	Columns	3	m³	280,000	789,000
C	150mm thick suspended roof slab	10	m²	39,000	390,000
D	150mm thick suspended roof gutter	65	m²	34,000	2,535,000
E	150mm thick suspended gutter side walls	80	m²	39,000	3,120,000
<u>Reinforcement; bars; BS 4449:1969 hot rolled round high yield steel straight or bent</u>					
F	16mm Diameter bars	200	kg	3100	620,000
G	12mm Diameter bars	1720	kg	3100	5,332,000
H	8mm Diameter bars	335	kg	3100	1,038,150
<u>Sawn formwork to:</u>					
J	Vertical sides of column	25	m²	15,000	375,000
K	Horizontal sides and soffits of beams	119	m²	20,000	2,380,000
L	To soffits of roof slab	10	m²	15,000	150,000
M	To soffits of gutter	64	m²	15,000	960,000
N	To sides of walls	160	m²	20,000	3,200,000
ELEMENT NO. 2 - FRAME CARRIED TO SUMMARY				23,740,500	16,367,700

NOVEMBER 2021



Epkan G. MADEMBA
 Head of
 DISTRICT ENGINEER WORKS
 21/12/2021
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06/01/2022
 06/01/2022
 06/01/2022

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO4: WALLS					
<u>Block Work</u>					
<u>Internal wall</u>					
<u>Solid Concrete block B.S 2028 type A; with strength 5MPa bedded and jointed in cement sand mortar(1:4)</u>					
A	150mm Wall	181	m ²	20,000	3,620,000
<u>External wall</u>					
<u>Solid Concrete block B.S 2028 type A; abd above.</u>					
B	230mm Wall	265	m ²	35,000	9,275,000
C	250x100mm window cill	3	m	25,000	75,000
<u>Metal Work/Partitions Works</u>					
<u>Powder coated 'Malt charcoal glazed Aluminium partitions to Architects design and approval, neoprene gaskets for bedding nylon brusher at head meeting stiles and rails and stainless steel screw approved by Architect complete with 6mm single clear glass 1800mm high up to ceiling level after 1000mm high blockwall from floor finished level including bedding in approved compound and fixing to concrete background</u>					
D	Partition with frame filled inwith 6mm glass as per detailed Architeral drawings with 3Nr.of doormeasured separately (m	22	m ²	150,000	3,300,000
<u>Powder Coated 'Matt Charcoal' aluminium doors to pattern neoprene gaskets for bedding nylon brusher at head meeting stiles, stainless steel screws and all necessary ironmongery to approval of Architect including bedding in approved compound in concrete background</u>					
E	40mm Thick door size 1200 x 2100mm high double swing door divided into two panels comprising of 40 x 70mm stiles, top, middle and bottom rail, lower panel filled in with and including 6mm thick MDF board 1000mm high infill, upper panel filled in with and including 6mm thick clear glass, complete with overhead door closer and other necessary ironmongery	3	No	800,000	2,400,000
ELEMENT NO4: WALLS CARRIED TO SUMMARY					18,670,000

NOVEMBER 2021

3/4/11

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO 5: DOORS					
<u>Frames Hardwood materials</u>					
(A)	50x150mm Frame with one labour	120	m	15000 36,000	1800000 3,600,000
B	50x150mm Frame with one labour	15	m	20,000	450,000
C	25 x 25mm Glazing beads	42	m	10,000	420,000
Prime Quality Hardwood Paneled Doors					
(D)	40mm Thick paneled double door size 1500 x 2100mm high comprising of 40x125mm rebated stiles, 40x125mm rebated top, middle and intermediate rail; 40x200mm bottom rail; divided into five panels; four equal vertical panels two on top and two on bottom each size 218x550mm; and a horizontal panel in between size 560x300mm; all panels filled in with and including 40mm thick hardwood boards.	2	No	30000 600,000	60000 1,200,000
(E)	Ditto size 1200x2100mm high Double door	1	No	44000 599,000	44000 599,000
(F)	Ditto size 900x2100mm high	2	No	500,000 400,000	1,000,000 800,000
Flush door					
G	Doors: formica plastic laminated facing both sides cherry Mkongo or Mninga or equal aproved hardwood lipping to all edges; solid core flush door; formic; storm grey with hardwood edge strip; 45mm thick MDF doors overall size 1500 x 2100mm ,double swing door	1	Nr.	450,000	450,000
H	Ditto but size 900x2100mm Single leaf	12	Nr.	400,000	4,800,000
J	Ditto with size 800x2100mm Single leaf	2	Nr.	350,000	700,000
<u>Ironmongery: supply and fix the following as manufactured by UNION."or other equal and approved to hardwood with matching screws"</u>					
K	150mm Brass butt hinges.	27	Pairs	15,000	405,000
L	3 Lever Mortice lock	6	Nr.	65,000	390,000
M	Two Lever Mortice lock	14	Nr.	600,000	840,000
N	Stainless steel Heavy duty door closer	4	Nr.	90,000	360,000
P	Double Action Swing Hinges for hardwood door approx 25 - 50Kg	6	pairs	20,000	120,000
<u>Clear glass</u>					
Q	5mm thick glass including beads glass over 0.5m ² not exceeding 1.00m ²	15	m ²	40,000	600,000
ELEMENT NO 5: DOORS CARRIED TO SUMMARY				15,925,000	15,970,000

NOVEMBER 2021



EDGAR & MADEIRA PO-RALG
DISTRICT ENGINEER WORKS
21/12/2021

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO 6: WINDOWS					
<u>Aluminium glazing approved by the Architect; single glazed combination frame and windows, 45 x 50mm Aluminium section framing, all mullions and transoms; epoxy power coat RAL 9006 finish, 6.14mm laminated glass pre assembled with stainless steel plates and screws window ironmongery, glazed beads, fiber mosquito net, rubber gaskets and backer rods and fixing to masonry or concrete grounds, sealing all around with non-hardening EPDM silicone sealant; screws bolts and fasteners</u>					
A	Window Size 1500 x 1800mm high	2	Nos	486,000	972,000
B	Ditto, Size 1500 x 1050mm high	16	Nos	283,500	4,536,000
C	Ditto, Size 900 x 1050mm high	6	Nos	170,000	1,020,000
Composite Items					
<u>Supply and fix weldable Mild steel to smooth edges window grills comprising of 75 x 75 mm RHS framework and braces, 25x25mm top, bottom, vertical and horizontal bars welded to frames spaced at 150mm centre to centre including all points</u>					
D	Ditto, Size 1500 x 1800mm high	2	Nos	202,500	405,000
E	Ditto, Size 1500 x 1050mm high	16	Nos	124,000	1,984,000
F	Ditto, Size 900 x 1050mm high	6	Nos	80,000	480,000
ELEMENT NO6:WINDOWS CARRIED TO SUMMARY					9,997,000

NOVEMBER 2021

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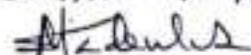
PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO.7: ROOFING					
<u>Sawn soft wood; Impregnated with Preservatives</u>					
A	50X150mm Tie Beam	276	m	7000	1,932,000
B	50X150mm Rafter	285	m	7000	1,995,000
C	50X100mm Kingpost and struts	510	m	6500	3,315,000
D	50X100mm Wall Plate	99	m	6500	643,500
E	50X75mm Purlins	473	m	2000	1,489,000
<u>Wrot soft wood; 'Podo'</u>					
F	20X250mm Fascia/Barge boards	30	m	15,000	450,000
<u>28 gauge IT5 corrugated iron roofing sheets fixed to timber purlins with 150mm end laps, 1 1/2 corrugations side laps fixed with roofing nails</u>					
G	Knot covering; sloping not exceeding 45 degrees from horizontal	396	m ²	32,000	12,672,000
H	Ridge capping	40	m	18,000	720,000
J	Valley capping	12	m	18,000	216,000
<u>Metal Works</u>					
K	16mm Diameter Anchor Bolts	64	No	10,000	640,000
L	10mm thick steel plate	32	No	25,000	800,000
<u>Roof drainage:</u>					
M	200mm Diameter UPVC class C rainwater down pipe neck with 710mm projection. With all accessories	32	M	35,000	1,120,000
N	200mm down pipe shoe	8	No	15,000	120,000
P	200mm Diameter nozzle outlet.	8	No	15,000	120,000
Q	Floor drain; 200mm diameter/full bora	8	No	48,000	384,000
ELEMENT NO. 07- ROOFING CARRIED TO SUMMARY					
					26,522,500
					26,520,500

NOVEMBER 2021




EDGAR G. MADEMBA



PO-RALG

DISTRICT ENGINEER WORKS

21/12/2021




ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NO8: FINISHINGS					
<u>Insitu finishings</u>					
<u>Plastering in two coats steel trowelled to smooth finish internally</u>					
A	15mm To walls	590	m ²	7000	4,130,000
B	15mm to sides of columns	25	m ²	7000	175,000
C	Horizontal sides and opening soffits of beams	108	m ²	7000	126,000
D	To soffits of roof slab	10	m ²	7000	70,000
E	To soffits of gutter	64	m ²	7000	448,000
F	To sides of walls	160	m ²	7000	1,120,000
<u>Plastering in two coats steel trowelled to smooth finish externally</u>					
G	22mm To walls	265	m ²	7000	1,855,000
TILES, SLAB OR BLOCK FINISHINGS					
<u>Glazed ceramic wall tiles with cushion edges to BS 1281 fixed to backings with cement sand mortar and pointing with white cement</u>					
H	400 x 250 x 6mm Tiling to walls	37	m ²	30,000	1,110,000
<u>Graniti GN 572 Mid Grey porcelain tiles "high quality" bedding in premixed thin set cement mortar and grouting with coloured sandless tile grout</u>					
J	600x600x9mm; 4mm diagonally/square joints ways; to floors levels	319	m ²	20,000 4,000	12,760,000 6,380,000
K	400 x 400 x 8mm; 4mm diagonally/square joints ways to floor levels of toilets	6	m ²	50,000	300,000
L	150mm Thick skirting	203	m	7000 3500	1,421,000 710,500
<u>To Collection</u>					
				24,145,000	17,765,000

NOVEMBER 2021

3/8/15

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SUNDRIES				
	<u>Floor edge strips</u>				
A	GENESIS ESA 10(10mm high) or similar and approved, aluminium straight edge trim; junctions of flooring finishes	31	m	900	155,100
	<u>Weather Bars</u>				
B	6 x 25mm Brass weather bar strip at external door thresholds; in prepared groove	4	m	100,000	400,000
	<u>Beds and Backings</u>				
	<u>Cement and sand (1:4) wood floated surface finish</u>			5000	1,625,000
C	32mm Bed to receive floor tiles	325	m ²	11,000	3,575,000
D	12mm Backing to receive wall tiles	37	m ²	10,000	370,000
	<u>Gypsum plasterboard BS 1230 Pt. 2 1970 tapered wallboard self tapping galvanized drive screws</u>				
E	9mm Thick ceiling; horizontal; internal	315	m ²	16,000	5,040,000
F	Cornice	203	m	566.5	115,000
G	Extra over for ceiling access 600 x 600mm.	1	nr	40,000	40,000
H	Supply and fix PVC ceiling complete including PVC and corner joint, shoe, nail and accessories	95	m ²	10,000	950,000
	<u>Sawn softwood pressure impregnated with preservatives</u>				
J	50x50mm brading fixed at 600mm centre to centre	914	m	2500	2,285,000
	<u>Tanga stone or equal and approved other materials</u>				
K	Wall finishing materials to the external façade as per drawings	22	m ²	45,000	990,000
				22,000	484,000
	To Collection			14,820,000	13,920,000

NOVEMBER 2021



EDGAR G. MADENLA
DISTRICT ENGINEER WORKS
MPWAPWA
21/12/2021

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SLAB TREATMENT				
	<u>Water proofing to exposed surface, concrete treatment for permanent corrosion free, water/ Moisture proofing by using by using krystol technology</u>				
	<u>Thoroughly clean concrete surfaces to remove all types of dirt; fill all visible cracks, honeycombs and holes as per krystol specification No 1; sand surface to smooth level, prepare and apply full coat of krystol T2; protect and cure properly as per manufacture's direction and krystol specification</u>				
A	To roof slabs.	10	M ²	10,000	100,000
B	To sides and bottom of concrete gutters.	225	M ²	10,000	2,250,000
C	Allow sum for LOGO for writing ICU INTENSIVE CARE UNIT to respective name of the council Hospital As per elevation by using ALUCOBOND Materials		Sum	500,000	500,000
	To Collection				2,850,000
	COLLECTION				
	Page 2/8/1			24,145,000	17,765,000
	Page 2/8/2			14,820,000	13,920,000
	Page 2/8/3			2,850,000	2,850,000
	ELEMENT NO 08: FINISHINGS CARRIED TO SUMMARY			41,815,000	34,535,000

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 9: PAINTING AND DECORATIONS				
	<u>Internal works</u>				
	<u>Prepare and apply one thinned coat and two full coats of wash 'n' ware paint</u>				
A	Plastered walls, columns, beams etc	877	m²	7000	6,139,000
B	Gypsum ceiling	315	m²	7000	2,205,000
	<u>External works</u>				
	<u>Prepare and apply one thinned coat and two full coats of weather guard paint to</u>				
C	Rendered surfaces	265	m²	7000	1,855,000
	<u>Varnishing; internal work; prepare and apply three coats of clear polyurethane clear varnish; wood surfaces.</u>				
D	General surfaces	42	m²	4000	168,000
E	Frames, linings and associated mouldings				
	200-300mm girth	120	m	2000	240,000
	ELEMENT NO. 9: PAINTING AND DECORATIONS CARRIED TO SUMMARY				10,607,000

NOVEMBER 2021



EDWARD G. MADEIRA ✓
~~Attended~~
 ASBESTOS ENGINEER WORKS
 21/12/2021 V W A P W BO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	ELEMENT NO. 10: SANITARY WARE INSTALLATIONS				
	WASH HAND BASIN				
A	White vitreous wash hand basin (HWB), size 750x440x200mm complete with self closing; semi pedestal and chain stay hole; fairline ½in pillar taps with clear acrylic handles; 1¼in bead chain waste and plug; 80cm slotted tail bolt stay; isovalve servicing valves. rubber plug with slotted tail; 32mm plastic bottle trap with 75mm seal. And other accessories as manufactured by castleware or equal and approved	4	No	200,000 1,500,000	1,200,000 6,000,000
	SLUICE SINKS				
B	B22362 Wall Mounted slop Hopper with Draining Board stainless steel slop hopper manufactured from Grade 304 stainless steel for the efficient and hygienic disposal of waste including draining boards, top slab, integral flushing rim, standard outlet for PVC sewerage systems Either P-trap or S- trap and the unit must be space -effective as per manufactured to the approval of Project Manager/ Engineer	2	Nr.	550,000 2,000,000	1,100,000 4,000,000
	SOAP DISH				
C	Ceramic soap dish Model A:101 as manufactured by castleware or equal aproved including fixing fixtures, fixed to the wall as per manufacturer recommendations	2	Nr.	20,000	40,000
	KITCHEN SINK				
	<u>Stainless steel kitchen single with single drainer complete with tap hole provided on the sink the waste unit as manufactured by castleware: sink Model No. D10050A including all fixing fixtures</u>				
D	Overall size L1000 X W500mm x D180mm bowel size L380 x W330mm	1	Nr.	100,000 450,000	100,000 450,000
	To Collection				2,790,000

NOVEMBER 2021

3/10/19

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
WC					
A	Eastern type low level W.C suite vitrious china to B.S 3402 s/p-trap, 9litres flushing tank with single push button complete with all necessary accessories, "Casterware"	2	No	100,000 200,000	200,000 400,000
TOILET PAPER ROLL HOLDER					
B	Wall mounted stainless Toilet paper holder Model BC 70 complete with fixing accessories as manufactured by castlware or equal and approved	2	Nr.	25,000 50,000	50,000 100,000
SHATTAF					
C	Wall mounted 'trigger spray' shattaf Oasis chrome finish complete with fixing accessories as manufactured by castlware or equal and approved	2	Nr.	20,000	40,000
BRUSH HOLDER					
D	Toilet brush holder 'model : BC 60 as manufactured by castlware or equal and approved including all fixing fixtures	2	Nr.	25,000 50,000	50,000 100,000
MIRROR					
E	600 X 800 X4mm Thick mirror with JX -S501 as per castlware or other approved, fixed on lacquer with double sided self adhesive pads finished with bevelled edges.	2	Nr.	60,000 120,000	120,000 240,000
FLOOR DRAIN					
F	150 X150mm stainless steel grating ABS flange with adptor or ring complete with kerdin-fix bounding compound, all as to manufacturers recommendations	3	Nr.	40,000	120,000
To Collection					1,100,000

NOVEMBER 2021



EDGAR G. MADEMLA

District Engineer Works

MPWA P&S

21/12/2021

06/01/2022 06/01/2022

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
<u>COLD WATER INSTALLATION:</u>					
<u>IPS pipes, Class D painted with special paint; including joints in running length. Fixing in accordance with manufacture's instructions.</u>					
<u>Distribution pipes:</u>					
<u>IPS pipes including screwed and socketted joints in running length:</u>					
A	25mm Diameter Polypipe, class D	50	M	3500	175,000
B	19mm Diameter Polypipe, class D	45	M	3500	157,500
C	Extra; elbow	23	No	5000	115,000
D	Ditto connectors	5	No	5000	25,000
E	Ditto Union	5	No	5000	25,000
F	Ditto Tee	5	No	5000	25,000
G	Ditto Reducing bush 25 x 19mm	5	No	10,000	50,000
H	19 mm Diameter supply IPS pipes; in blockwork chase.	18	M	3500	63,000
J	Extra ditto; elbow	20	No	2500	50,000
K	Ditto tee	10	No	5000	50,000
L	Ditto: Union	10	No	5000	50,000
M	Ditto: Nipple	12	No	5000	60,000
N	Ditto: connector	1	No	5000	5000
P	Ditto: tee connector	1	No	5000	5000
Q	13 mm Diameter supply IPS pipes; in blockwork chase.	12	M	3500	42,000
<u>To Collection</u>					947,500

NOVEMBER 2021

3/10/21

PO-RALG

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
A	Extra reducing tee 19x19x13	10	No	5000 10,000	50,000 100,000
B	Extra; reducing bush 19x13	10	No	5000 10,000	50,000 100,000
C	Extra; 13mm elbow.	3	No	5000	15,000
D	Ditto; tee.	3	No	5000	15,000
E	Ditto: Nipple	6	No	5000	30,000
F	Ditto; socket	14	No	5000 2500	70,000 35,000
	<u>Flexible piping:</u>				
G	Flexible pipe to cistern	2	No	10,000 5000	20,000 25,000
H	Flexible pipe to Hand Wash Basin and kitchen Sink	5	No	10,000	50,000
J	Flexible pipe to sluice	2	No	10,000 20,000	20,000 40,000
K	Angle valve	4	No	20,000	80,000
L	Bib tape pex 1/2	2	No	25,000	50,000
M	Pillar tape pex 1/2	4	No	10,000 30,000	40,000 120,000
N	Stop cock pex 3/4	7	No	25,000 15,000	175,000 105,000
	GENERAL ITEMS				
P	Thread seal tape	5	No	15,000	75,000
Q	Shellack	1	No	20,000	20,000
R	Tangit	1	No	40,000 5000	40,000 20,000
S	Bolts pairs 12mm length 100mm or 125mm	4	No	10,000	40,000
T	Fisher plug pairs	22	No	5,000 10,000	110,000 220,000
TO COLLECTION					1,240,000

NOVEMBER 2021

0/22

EDUARDO G. MADEMIA V
Ateneo
By DE
21/12/2024

PO-RALG

21/12/2024

12

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
	<u>UPVC pipes; Class 'E'; including fittings in running length.</u>				
(A)	38mm Diameter pipe; in chase in block work.	60	M	5000 19,000	200,000 600,000
(B)	Extra; Equal tee 38x38x38mm.	41	No	5000 10,000	205,000 419,000
(C)	Extra; elbow	30	No	10,000	300,000
(D)	Ditto; Plug	6	No	10,000	60,000
(E)	Extra; tee	15	No	10,000	150,000
(F)	Ditto; bend	2	No	10,000	20,000
(G)	Ditto; socket female thread	5	No	10,000	50,000
(H)	50mm pipe	40	M	7000 14,000	280,000 560,000
(J)	Ditto; bend	2	No	10,000	20,000
(K)	Ditto; socket female thread	4	No	5000 10,000	20,000 40,000
(L)	Plug	18	No	10,000 5000	180,000 90,000
	<u>SOIL AND PIPES:</u>				
	<u>UPVC pipes and fittings; Class 'B'; in running lengths; BS 4660 for underground pipes and B.S 3506 for pipes above ground.</u>				
(M)	50mm. Diameter pipes; fixed to walls.	12	M	10,000	120,000
(N)	100mm Diameter pipes laid in trenches.	48	M	6000 12,000	288,000 576,000
(P)	Extra; 100mm Elbow	2	No	20,000	40,000
(Q)	100mm Diameter PVC vent coil.	1	No	15,000	15,000
(R)	P-Trap 4'	4	No	15,000	60,000
(S)	Bottle trap flexible 38mm	10	No	20,000 10,000	200,000 100,000
TO COLLECTION					3,440,000

NOVEMBER 2021

3/10/23

PO-RALG

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
FIRE FIGHTING INSTALLATIONS:					
A	9Kg. dry powder 'NAFFCO' or any other equal and approved fire extinguishers, fixed to wall with and including brackets plugged on block work.	2	No	70,000 120,000	140,000 240,000
GULLY TRAPS					
B	Construct a standard gully trap 300x300x300mm deep; in thick concrete block walls complete with benching and all fittings and gully trap cover	6	No	10,000 50,000	60,000 300,000
TESTING					
C	Allow for testing and commissioning the whole plumbing and drainage installation as per service Engineer approval	-	Item	-	50,000 200,000
D	Builders work in connection to plumbing	-	Item	-	100,000 200,000
SUNDRIES:					
E	Allow for preparation and production of four (4) copies of 'AS BUILT DRAWINGS' of plumbing and engineering installations to Engineer's satisfaction.	-	Item	-	50,000 200,000
			COLLECTION		1,140,000.00
			COLLECTIONS		340,000
			Page 3/10/1		2,790,000 ✓
			Page 3/10/2		1,000,000 ✓
			Page 3/10/3		947,500 ✓
			Page 3/10/4		1,240,000 ✓
			Page 3/10/5		3,440,000 ✓
			Page 3/10/6		1,140,000
			ELEMENT NO. 10 SANITARY WARE AND INSTALLATIONS CARRIED TO SUMMARY		1,340,000 x
					10,757,000
					10,557,000.00

NOVEMBER 2021



EDGAR G. MADEIRA

Attestation

Sg DE

PO-RALG

21/11/2021
DISTRICT ENGINEER WORKS
MPWAPWA

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
ELEMENT NR.11- ELECTRICAL INSTALLATION					
Power Distribution.					
A	4Ways TPN distribution board (DB 3) with 100A/300mmA RCCB incomer and outgoing MCBs as shown in Schematic diagram as ABB or approved equal.	1	No	120,000	120,000
B	4C x16 mm ² Cu,PVC/PVC cable from neaby Tanesco LV Pole to Distribution Board(DB 1).	25	Lm	35,000	875,000
Small Power Distribution					
C	25mm Heavy duty PVC Conduity concealed under walls and roof for all power and Data points	100	Nos	3000	300,000
D	Single core 2.5 sqmm PVC copper cables from distribution Boards to all power outlet points				
	Red Wire	3	Roll	110,000	330,000
	Black Wire	3	Roll	110,000	330,000
	Green Wire	3	Roll	110,000	330,000
E	Twin switch socket ABB or other equal approved	21	Nos	25,000	525,000
F	Telecommunications outlet box	20	Nos	15,000	300,000
Light Fittings					
G	20mm Heavy duty PVC Conduity concealed under walls and roof for all Lighting and DataFire points	180	Nos	3000	540,000
H	Single core 1.5 sqmm PVC copper cables from distribution Boards to all lighting and ceiling fans outlet points				
	Red Wire	6	Roll	80,000	480,000
	Black Wire	6	Roll	80,000	480,000
	Green Wire	6	Roll	80,000	480,000
J	TYPE A:1 x 36W; 1200mm standard, fluorescent fitting as LIGHTING DIRECT PHOENIX	22	Nos	120,000 60,000	2,640,000 1,320,000
					7,730,000

NOVEMBER 2021

3/11/25

PO-RALG

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	56" Blade National Ceiling fan c/w fan regulator	4	Nos	150,000	600,000
B	Ceiling light complete with energy saver 18w	13	Nos	80,000	1,040,000
C	2 way 1 gang light switch as Legrand or equivalent	7	Nos	17,000	119,000
D	1 way 1 gang light switch as Legrand or equivalent	11	Nos	17,000	187,000
E	100mm diameter heavy gauge PVC Pipe	10	Nos	15,000	150,000
F	Allow for earthing of the entire building in accordance with I.E.E. and TANESCO regulations to the whole of electrical installations	1	item	200,000	200,000
G	Earth wire 4sqm	20	m	8000	160,000
H	Earth rod approved copper 16mm not less than 1200mm	2	No	40,000	80,000
Air condition					
J	Smart inveter indoor wall mounted fan evaporating units with its outdoor unit, the indoor unit shall be complete with a wireless remote controller, pipes brackets and connecting cable, cooling capacity 24000BTU/hr	7	No	900,000	6,300,000
K	PVC conduits pipe sleeve class C size 2 inch in the ceiling/blockwall or duct for Airconditions, including Elbow and other connection	m	24	8000	192,000
To Collection					9,128,000 ✓
COLLECTION					7,720,000 ✓
Page 3/11/1					9,128,000 ✓
Page 3/11/2					16,858,000 ✓
ELEMENT NO. 11 ELECTRICAL INSTALLATIONS					

NOVEMBER 2021



EDWAR G. MADENIA
PO-RALG
21/12/2021
DISTRICT ENGINEER WORKS
A. W. A.

14

ITEM	DESCRIPTIONS OF WORKS	QTY	UNIT	RATE	AMOUNT
ELEMENT NR. 12: ICT INSTALLATION					
A	Switch 24-port with Gigabit Uplinks	0	PC	46,000	—
B	Cat 6 UTP CABLE	1	PC	400,000	400,000
C	6U data cabinet wall mounted including all accessories eg. PDU	0	PC	950,000	—
D	Rack Mountable UPS 1100VA	0	PC	4100,000	—
E	1m Patch cord	6	PC	3000	4800 ^{15,000}
F	3m Patch cord	6	PC	5000	30,000
G	Cat 6 patch panel 24 Port	0	PC	380,000	—
H	Cable manager	0	PC	180,000	—
J	Dual face plate	3	PC	27,000	81,000
K	Back Box Single (Steel)	3	PC	3000	9000
L	Conduit pipe 1.0"	10	PC	2000	20,000
Sub Total for ICT Materials					558,000 ✓
Add :Labour cost for subtotal 1					129,500
Add :Profit from Sub total 1					50,000
Add: Attendance for sub total 1					50,000
Grand total for Element Nr. 12 ICT Installation carried to Summary Page					787,500 ✓

NOVEMBER 2021

3/12/27

PO-RALG

ITEM	DESCRIPTION	PAGE	AMOUNT
	BILL NR.3: MEASURED WORKS ICU BLOCK		
	ELEMENT NO. 01 - SUBSTRUCTURE	3/1/3	27,750,200
	ELEMENT NO. 02 - FRAME	3/2/1.	16,367,700
	ELEMENT NO. 03 - STAIRS	NA	NA
	ELEMENT NO. 04- WALLS	3/4/1.	18,670,000
	ELEMENT NO. 05- DOORS →	3/5/1	15,970,000
	ELEMENT NO. 06 - WINDOWS	3/6/1	9,397,000
	ELEMENT NO. 07 - ROOF	3/7/1.	28,522,500
	ELEMENT NO. 08 - FINISHINGS	3/8/3.	34,535,000
	ELEMENT NO. 09 - PAINTING AND DECORATIONS	3/9/1.	10,607,000
	ELEMENT NO.10- PLUMBING	3/10/6.	10,751,000
	ELEMENT NO. 11 ELECTRICAL INSTALLATIONS	3/11/2.	16,858,000
	ELEMENT NR. 12: ICT INSTALLATION	3/12/1.	797,500
	BILL NO.3 - MEASURED WORKS CARRIED GENERAL SUMMARY	T.Shs	188,221,900

NOVEMBER 2021

EDUAR G. MADEMLA
PO-RALGADE
DISTRICT ENGINEER WORKS
21/12/2021
MFWA PWA

15

INTENSIVE CARE UNIT BUILDING

[illegible]

PO-RALG

5.0 POWER OF ATTORNEY

We, the undersigned AZ HAR CONSTRUCTION COMPANY LTD OF PO BOX 35918 DAR (Name of Company)
A company duly incorporated in Tanzania whose office is at MWINGI AREA by virtue of company's resolution dated 19/1/2022 Attached hereto, hereby appoint SAMU SAKHE RWEGERA (Name by donee) with identity/Passport No. 19720221411800004-22 Whose signature appears below.
Signature [Signature]

With full powers to act for us in our name and for our use to do the following act related to following project CONSTRUCTION OF INFANTRY UNIT CAMP (I.C.U.) AT MURUPWA DISTRICT HOSPITAL NE. LG (023/2021-22) HQ/M/116 (Name of project)
(i) To negotiate contract of works/services ✓
(ii) To sign, execute, endorse all document ✓
(iii) To open and close accounts: and ✓
(iv) To commence any action or actions, suit of suits or defend us in any action ✓
(Tick whichever is/are applicable).

AND GENERALLY to execute and do things which he/she shall deem necessary or appropriate with the same effect as if we had done, executed or performed it ourselves in relation to the above named project.

In witness hereof we are entitled to sign for and on behalf of AZ HAR CONSTRUCTION COMPANY LTD (Name of company) as we have signed this power of attorney of this 3rd Day of JANUARY 2022

This power of Attorney is valid until 3/6/2022 (Date)

Authorized Officer of the Company
Name SHABANI KAPINGA
Designation DIRECTOR
Signature [Signature]

Authorized Officer of the Company
Name HAMIDA MOHAMMEDI
Designation SECRETARY
Signature H. Mohammadi

This is to certify that SHABANI KAPINGA and HAMIDA MOHAMMEDI (Name of donors) have this 03 day of JANUARY 2022 in my presence signed this power of attorney on behalf of the company above named.

BEFORE ME
[Signature]
Advocate,
Notary Public
&
Commissioner
for Oaths
P. O. Box 04, MSHI

[Signature]
Advocate,
Notary Public
&
Commissioner
for Oaths
Official stamp
P. O. Box 04, MSHI



SEC IX 3

1. Tender Securing Declaration

Date: 03/01/2022

Tender No.: **LGA/023/2021-22/HQ/W/116**
Alternative No.: **NONE**

To: District Executive Director,
Mpwapwa District Council,
P.O.Box 12, Dodoma
Tanzania.

We, the undersigned, declare that:

We understand that, according to your conditions, tenders must be supported by a *Tender Securing Declaration* whichever was requested by Procuring Entity.

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 determined by the Authority, if we are in breach of our obligation(s) under the tender conditions, because we:

- (a) have withdrawn or modified our Tender during the period of tender validity specified in the Form of Tender;
- (b) disagreement to arithmetical correction made to the tender price; or
- (c) having been notified of the acceptance of our Tender by the Procuring Entity during the period of tender validity, (i) failure to sign the contract if required by Procuring Entity to do so or (ii) fail or refuse to furnish the Performance Security or to comply with any other condition precedent to signing the contract specified in the tendering documents.

We understand this *Tender Securing Declaration* whichever was requested by Procuring Entity] shall expire if we are not the successful Tenderer, upon the earlier of (i) our receipt of your notification to us of the name of the successful Tenderer; or (ii) twenty-eight days after the expiration of our Tender.

Signed: 

In the capacity of **COMPANY SECRETARY**

Name: **SALUM RWE GASIRA**

Duly authorized to sign the tender for and on behalf of: **AZAHAR CONSTRUCTION COMPANY LIMITED,**



Dated on 03 day of JANUARY, 2022
Corporate Seal (where appropriate)

MEMORANDUM (Format 1)

(Regulation 78 (2) of the Public Procurement Regulations GN No. 446 of 2013 as Amended in 2016)

This company AZHAR CONSTRUCTION CO LTD places importance on competitive bidding taking place on a basis that is free, fair, competitive and not open to abuse. It is pleased to confirm that it will not offer or facilitate, directly or indirectly, any improper inducement or reward to any public officer their relations or business associates, in connection with its bid, or in the subsequent performance of the contract if it is successful.

This company has an Anti-Bribery Policy/Code of Conduct and a Compliance Program which includes all reasonable steps necessary to assure that the No-bribery commitment given in this statement will be complied with by its managers and employees, as well as by all third parties working with this company on the public sector projects, or contract including agents, consultants, consortium partners, sub-contractors and suppliers. Copies of our Anti-Bribery Policy/Code of Conduct and Compliance Program are attached

Authorized Signature: _____

Name and Title of Signatory: _____
director

SHABANI M KABIR Managing

Name of Bidder: AZHAR CONSTRUCTION CO LTD

Address: P.O. BOX 35918 DSM.



ANTI-BRIBERY PLEDGE/CODE OF CONDUCT BY THE COMPANY

We M/S AZHAR Construction Company limited place importance on competitive tendering taking place on a basis that is free, fair, and competitive and not open to abuse. We are pleased to confirm that we will not offer or facilitate, directly or indirectly, any improper inducement or reward to any public officer, their relations or business associates, in connection with tender, or in the subsequent performance of the contract if it is successful.

We M/S AZHAR Construction Company limited, have an Anti-Bribery Policy/Code of Conduct and a Compliance Program which includes all reasonable steps necessary to assure that No-bribery commitment given in this statement will be complied with by its managers and employees, as well as by all third parties working with this company on the public sector projects, or contract including agents, consultants, consortium partners, sub-contractors and suppliers.

We M/S AZHAR Construction Company Limited welcome the action taken by the Government to strengthen transparency and accountability. In this context we pledge to do the following:

- 1) Not offer or give bribes or any form of inducement to any public official in connection with a pending bid
- 2) Not permit any one whether our employee or an independent commission agent to do so on our behalf.
- 3) Make full disclosure in our bids of the beneficiaries of payment relating to the bids to any person other than our employee but including bonus payment, which may be made to employee.
- 4) Formally, we undertake to issue instruction to all our employee and agents or other representatives, directing them at all times to comply with the laws of Tanzania and in particular not to offer or to pay bribes or other form of inducement to officials, whether directly or indirectly.

Signed by: **Eng Shabani Mrisho Kapinga**

In the capacity of: **Director**

Signature



Date: 21st November 2021



COMPANY CERTIFICATE
COMPANY PARTICULARS

Note: Leseni ya Biashara ipo kwanza

Substantia Document.





TANZANIA REVENUE AUTHORITY

ISO: 9001:2015 CERTIFIED

TAX CLEARANCE CERTIFICATE

(Issued Under Regulation 103 of Tax Administration (General) Regulations, 2016)

Licensing Authority: TIN: 101-186-555

Tax Certificate Number:

131-0092-2708

HALMASHAURI YA MANISPAA YA KINONDONI
MAGOMENI MAKUTI

P. O. Box 31902

DAR ES SALAAM

Issuing Office: Kinondoni

Telephone: 022-2771841

Date of Issue: 14 April 2021

Expiry Date: 31 December 2021

Taxpayer Name **AZHAR CONSTRUCTION COMPANY LIMITED.**

Trading Name

Taxpayer Identification Number **109-702-935**

VAT Registration Number **40-005620-A**

Company Registration Number **75468**

Business Premises located at: Plot Number 470; Block Number -; Street **MWENGE-CALABASH PUB**

This is to certify that the above registered Taxpayer has complied with the tax laws and has been granted Tax Clearance Certificate with respect to the following business(es):

1. Other passenger land transport

2. Construction of buildings

3.

4.

This certificate should be tendered in its original form and it is valid only if it is embossed with the Official Seal.

ABDUL Y. MAPEMBE

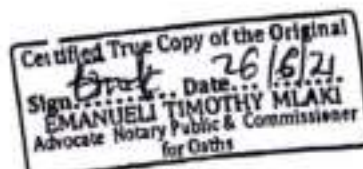
COMMISSIONER FOR DOMESTIC REVENUE

14 April 2021

Official Seal

Disclaimer: This Tax Clearance Certificate shall not preclude the Commissioner General from demanding and recovering taxes established after issuance of this Certificate.

This Certificate is issued free of charge





TANZANIA REVENUE AUTHORITY

Certificate of Registration for Value Added Tax (VAT)

(ISSUED UNDER SECTION 20 OF THE VALUE ADDED TAX ACT NO. 24 OF 1997)

**THIS IS TO CERTIFY THAT
AZHAR CONSTRUCTION COMPANY LIMITED.**

WHOSE TAXPAYER IDENTIFICATION NUMBER (TIN) IS

109-702-935

HAS BEEN REGISTERED FOR VALUE ADDED TAX (VAT)

AND ASSIGNED VAT REGISTRATION NUMBER (VRN)

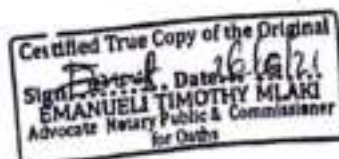
40-005620-A

**FOR BUSINESS LOCATED AT MLALAKUWA MWENGE 176
DAR ES SALAAM**

WITH EFFECT FROM 31 March 2010

GIVEN UNDER MY HAND

THIS 31st DAY OF March 2010



NOTE: THE REQUIREMENTS UNDER WHICH THIS CERTIFICATE IS ISSUED ARE STATED OVERLEAF

SN/22/3174

TFN. 226
(Rev. 2/96)

ID: 51466

JAMHURI YA MUUNGANO WA TANZANIA

LESENI YA BIASHARA

B 3853174

(Imetolewa chini ya Sheria ya Leseni za Biashara Na. 25 ya Mwaka
1972 marekebisho ya mwaka 1980 na masharti yaliyo nyuma)

*Futa isiyotakiwa.

1. Ofisi iliyotolewa MANISPAA YA UBUNGO
2. Nambari ya Ushuru wa mapato 109 - 702 - 935
3. Leseni imetolewa kwa AZHAR CONSTRUCTION COMPANY LIMITED
kuendesha biashara ya BUILDING CONTRACTOR CLASS ONE
katika Wilaya/Kanda* ya UBUNGO Mtaa SINZA A
4. Ni ya Shina/Tawi*

Ada Sh. 1,000,000/= Nambari ya Stakabadhi 165698
ya tarehe 31/08/2021

5. Mpya inaendeleza muda wa Leseni Na. MPYA



Tarehe

01/09/2021

0787-021444

GP-Dsm

Sahihi na Muhiri ya Mtoaji Leseni

HENGATU MUSA

Unfiled True Copy of the Original
 Sign: [Signature] Date: 22/11/21
 EMANUELI TIMOTHY MIAKI
 Advocate Notary Public & Commissioner
 for Oaths

CTIN: 1019193



TANZANIA REVENUE AUTHORITY

CERTIFICATE OF REGISTRATION FOR TAXPAYER IDENTIFICATION NUMBER (TIN)

(ISSUED UNDER SECTION 23 OF THE TAX ADMINISTRATION ACT 2015)

**THIS IS TO CERTIFY THAT
AZHAR CONSTRUCTION COMPANY LIMITED.**

**HAS BEEN REGISTERED WITH THE TANZANIA REVENUE AUTHORITY
AND ASSIGNED THE TAXPAYER IDENTIFICATION NUMBER**

109-702-935

WITH EFFECT FROM: 26 March 2010

TRA LOCATION: KINONDONI

TAX OFFICE: KINONDONI

PHYSICAL LOCATION: PLOT No. 470

STREET / AREA: MWENGE-CALABASH PUB

Certified True Copy of the Original
Book No. 26664
Signed: EMANUELL TIMOTHY MILAKI
Advocate, Notary Public & Commissioner
for Oaths

OFFICIAL SEAL

**ELIJAH O. MWANDUMBE
COMMISSIONER FOR DOMESTIC REVENUE**

NOTE: THE REQUIREMENTS UNDER WHICH THIS CERTIFICATE IS ISSUED ARE STATED OVER LEAF





THE UNITED REPUBLIC OF TANZANIA
PRIME MINISTER'S OFFICE
LABOUR, YOUTH, EMPLOYMENT AND PEOPLE WITH DISABILITY
OCCUPATIONAL SAFETY AND HEALTH AUTHORITY
THE OCCUPATIONAL HEALTH AND SAFETY ACT NO.5 OF 2003



CERTIFICATE OF REGISTRATION OF A FACTORY/ WORKPLACE

NO. OF REG. CERTIFICATE: **DAR/6887**

NO. **2114/16/17**

DATE OF ISSUE: **8-May-2017**

I hereby certify that the workplace named below has been duly registered in pursuance of section 17(2) of The occupational Health and Safety Act.5 of 2003.

Name of the Occupier / Owner: **AZHAR CONSTRUCTION CO.LIMITED**

Address of Factory/Workplace: **P.O.BOX 35918, DAR ES SALAAM**

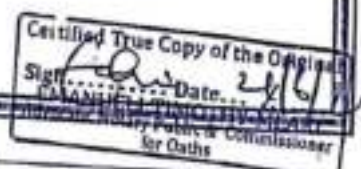
Location of Factory/ Workplace: **MWENGE, SAM NUJOMA ROAD,
KINONDONI MUNICIPALITY**

Nature of Work: **CONSTRUCTION BUSINESS**

KHADIJA H. MWENDA
Ag. CHIEF INSPECTOR

Note

1. This certificate is valid only in respect of the occupier and workplace name above.
2. This certificate is issued under, and solely for the purpose of, the Occupational Health and safety Act, and without prejudice to the requirements of any other legislation relating to the occupation of premises for industry purposes.
3. This certificate should be attached to the General Register



- 1.1 **COMPANY NAME:** AZHAR Construction Company Limited.
- 1.2 **MAIN ACTIVITIES OF THE COMPANY:**
- 1.3 Building works & Civil Engineering Works
- 1.3 **ADDRESS OF HEAD OFFICE:**
- P.O Box 35918, Dar Es Salaam
Telephone no. 0787-021 444,0716 021-444
E-mail: kapinga68@gmail.com
- 1.4 **HEAD OFFICE LOCATION:**
- P. O. Box 35918 Mlimani Tower Building-Second Floor, Sam Nujoma Road Dar es salaam
- 1.5 **BRANCH OFFICE:**
- P.O BOX , Zanzibar
Telephone nos. 0787-021 444,0716 021-444
- 1.6 **PLACE OF REGISTRATION:** Kinondoni Municipal Council (Dar Es Salaam)
PLACE OF BUSINESS: Mlimani Tower Building-Second Floor,
- 1.7 **COMPANY DIRECTORS:**
1. Shabani Kapinga: BSc Eng. (Hons.), P.Eng. (Tz)
2. Hussein Mohamed: BSc. Eng. (Hons.), MIET, P.Eng. (Tz)
3. Hamida Mohamedi :
- 1.8 **COMPANY REGISTRATION:**
- Tanzania: Registered with Certificate of Incorporation no. 75468
Zanzibar: Registered by Registrar of Companies Zanzibar, Reg. No. F87292018
- 1.9 **REGISTRATION WITH CRB:**
- Registered building works contractor in **Class ONE**,
Certificate of Registration no. **B1/174/01/2020**
- Registered Civil works contractor in **Class FOUR**,
Certificate of Registration No. **C4/429/01/2020**
- 1.10 **TAXPAYER IDENTIFICATION NUMBER:** TIN NO. 109-702-935
- 1.11 **VALUE ADDED TAX (VAT):** Registration No. 40-005620-A
- 1.12 **VALID BUSSINESS LICENCE:**
- B No. 3544906 – for Building Works
B No. 3544904 – for Civil Works
- 1.13 **COMPANY BANKERS:**
- CRDB, BANK UBUNGO Branch, DSM: Ac No. 0150435078000
- 1.14 **IMPENDING CLAIMS OR COURT JUDGEMENT AGAINST THE COMPANY:** NIL.





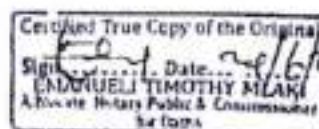
United Republic of Tanzania
Contractors Registration Board

Receipt Voucher

P. O. Box 13374
Tel: No. 2131169,
2137962-3
Fax : 2137964
Dar es Salaam
Email : crbinfo@crbtz.org
Date 18/02/2021

Receipt Number	: CRB-R 2020-7633
Received From	: AZHAR CONSTRUCTION CO. LIMITED
Amount	: TShs 1,000,000.00
Amount in Words	: (TShs) One Million, Thousand
Narration	: ANNUAL FEE FOR YEAR 2020/21 FOR B1, AZHAR CONSTRUCTION CO. LIMITED
Date Issued	: 18/02/2021

With Thanks





No. 7057

CONTRACTORS REGISTRATION BOARD
CERTIFICATE OF REGISTRATION

This is to Certify that
***Azhar Construction Company
Limited***

is registered as
BUILDING CONTRACTOR

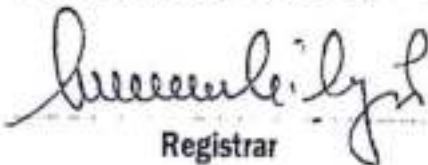
Class One

Registration No. **B1/174/01/2020** Category **Local**

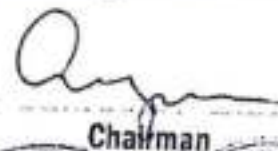
In accordance with the provisions of The Contractors Registration
Act No. 17 of 1997

In witness whereof the common seal has been affixed

hereto on this **9th** day of **January, 2020**


Registrar




Chairman

Certified True Copy of the Original
Sign. **EMANUELI TIMOTHY MILAKI**
Date **26/1/2020**
Advocate, Notary Public & Commissioner
for Oaths



SN/22/3175

TFN. 226
(Rev. 2/96)



ID: 51468

JAMHURI YA MUUNGANO WA TANZANIA

LESENI YA BIASHARA

B 3853175

(Imetolewa chini ya Sheria ya Leseni za Biashara Na. 25 ya Mwaka 1972 marekebisho ya mwaka 1980 na masharti yaliyo nyuma)

*Futa isiyotakiwa.

1. Ofisi iliyotolewa MANISPAA YA UBUNGO

2. Nambari ya Ushuru wa mapato 109 - 702 - 935

3. Leseni imetolewa kwa AZHAR CONSTRUCTION COMPANY LIMITED

CIVIL WORKS CONTRACTOR CLASS IV
kuendesha biashara ya

katika Wilaya/Kanda* ya UBUNGO Mtaa SINZA C

4. Ni ya Shina/Tawi*

Ada Sh. 650,000/- Nambari ya Stakabadhi 165 698

ya tarehe 31/08/2021

5. Mpya inaendeleza* muda wa Leseni Na. MPYA

ya tarehe —

(ii) Muda wa leseni hii utaishia 30 Juni 20 31/08/2022

Certified True Copy of the Original
Date 31/08/2022
Signature EMANUELI TIMOTHY MLAKI
Advocate Notary Public & Commissioner for Oaths

Tarehe 01/09/2021

GP-Dsm 0787 - 021444

Sahihi na Mufariji wa Mtoaji Leseni
IRHGHU WILUWA



No. 6679

CONTRACTORS REGISTRATION BOARD CERTIFICATE OF REGISTRATION

This is to Certify that

Azhar Construction Company Limited

is registered as

CIVIL WORKS CONTRACTOR

Class *Four*

Registration No. *C4/429/01/2020* Category *Local*

In accordance with the provisions of The Contractors Registration
Act No. 17 of 1997

In witness whereof the common seal has been affixed
hereto on this *9th* day of *January, 2020*

[Signature]

Registrar



[Signature]

Chairman

This Certificate is held subject to the By-laws made under the Act



TANZANIA



Certificate of Incorporation

Section 15

No 73469

I HEREBY CERTIFY THAT

AZHAR CONSTRUCTION COMPANY LIMITED

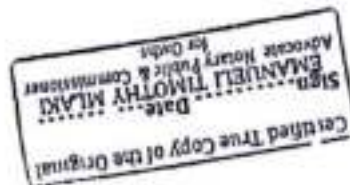
is this day incorporated under the Companies
Act, 2002 and that the Company is Limited

Given under my hand at Dar es salaam

this 17TH day of MARCH

TWO THOUSAND AND TEN

Asst. Registrar of Companies



METHODOLOGY

PROGRAMME OF WORK.

This method statement describes generally the procedure with which the works shall be carried out, health and safety measures on site, quality assurance and control in the course of execution of the works.

SCOPE OF WORKS

Works in this method statement have been broken into the following major items

-
- Demolition works
 - Mobilization and establishment on site
 - Setting out
 - Excavation and earthworks
 - Substructure construction
 - Superstructure construction
 - Concrete works
 - Roofing
 - Doors and windows
 - Plumbing works
 - Finishing works
 - Quality assurance and control
 - Health and safety measures

Mobilization/establishment on site

Mobilization of equipment and establishment of site office and installation of all facilities for smooth works execution shall commence immediately after the site possession.

Demolition Work.



Wall demolition, hacking work, removing doors and windows and disconnecting work related to plumbing and sanitary appliances, shall be done carefully to prevent injury to people around the site. This will be done by our team of labor. Using of personal protective equipment all the time will be emphasized and regular checks by the health and safety supervisor.

Setting out

Setting out shall be carried out by means of a digital theodolite. Levels of the natural ground shall be read and recorded, profiles erected and demarcation done as per drawings. All these shall be undertaken by our surveying team.

Excavation and Earthworks

Excavations for foundations and any other pit shall be done by manual labour. Planking and Strutting (to the discretion of the engineer) shall be done to all excavations posing risk to the personnel working around them. Excavations shall be kept water free all the time by means of mechanical water pumps. Water pumped out shall be channeled away such that it poses neither safety nor health risk. All excavations shall have warning tape put around especially after closure of the works.

Substructure construction

Concrete pads/trip foundations below the ground level shall be done after verification of the bottom of excavation levels. Safety of personnel shall be adhered to by insisting the use of personal protective equipments all the time and regular checks by the health and safety supervisor.

Walling & superstructure construction

Prior to commencement of the work, all the foundation pits shall be backfilled with well compacted selected material. Straightness and verticality is of paramount importance shall therefore be maintained throughout.

Concrete works



Concrete shall be mixed by heavy duty rotary concrete mixers. Batchir shall be by volume unless otherwise stated by the engineer. Marine boards shall be used as formworks with proper bracings and props depending on the element being poured. Concrete cover to steel shall be maintained by means of spacer blocks as per specifications. Delivery of the concrete from the mixer shall be by dumpers. Vibration shall be ensured all the time by poker vibrators.

Roofing

The structural stability of the roofing must be confirmed. Scaffolding of the working area, together with handrails, guardrails, platforms or staging required for safe access and to prevent operatives from falling should be maintained. The trusses will be fixed in sequence and placed in accordance with working drawings. The diagonal bracing will be fixed to the top of the first truss and nailed to the wall plate using 75mm long galvanized nails. All longitudinal bracing will be fixed to the trusses, ceiling ties and struts using 75mm long galvanized nails. The trusses will then be fixed to the walls and gables by bracing using galvanized metal retaining straps. After completion of roof structure, roof covering will be fixed as per manufacture instruction.

Doors, windows and Plumbing works

Door Frames, Doors shutters and windows shall be constructed off site, then it will be brought to site for fixing. Installation of pipes for water supply and sewerage shall be done after completion of superstructure. Pipes and connectors shall be those approved/recommended by the engineer/architect. Samples for all sanitary appliances will be submitted to client for approval

Finishing works

Plastering, rendering, painting and the like shall be neatly done with the specified materials. Works at higher storeys precaution shall be taken for falling objects by installing a warning sign for general public and site personnel who shall always put on hard hats.



Quality assurance and Quality control

There shall be a site engineers and foremen all the time onsite to ensure the specifications are adhered to. Concrete cubes shall be taken whenever there is concrete work and arrangement done jointly with the engineer for testing.

Health and safety

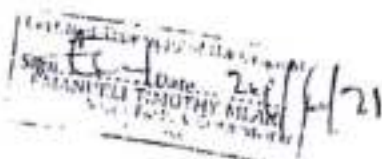
It is our company's policy to conduct health and safety inductions to new employees. However we shall be arranging onsite health and safety inductions to equip the workers with the knowledge on their safety and raise their HIV/AIDS awareness. First aid services shall be made available on site all the time and a standby vehicle to rush the injured to the nearby hospital/health centre. All incidents pertaining to health and safety shall be recorded and reported to the engineer/architect timely.



FINANCIAL STATEMENT
ANNUAL TURNOVER
FINANCIAL CAPABILITY

AZHAR CONSTRUCTION COMPANY LIMITED

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2020

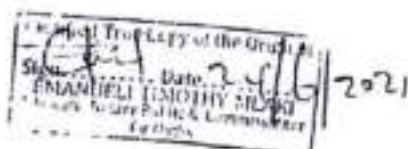


AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

For the year ended 31 December 2020

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AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Directors' Report

For the year ended 31 December 2020

The directors submit their report and the audited financial statements for year ended 31 December 2020

1. PRINCIPAL ACTIVITIES

The Principal activity of the Company is Construction

2. RESULTS

The results of the company's operations for the year are set out on page 5.

3. DIVIDENDS

During the year the company paid no dividends to Share holders

4. SOLVENCY

The company's state of affairs at 31 December 2020 is set out on page 6. The Board of Directors considers the company to be solvent within the meaning ascribed by the Companies' Act (Cap 12).

5. ADMINISTRATIVE MATTERS

The company is capable of handling all administrative matters.

6. DIRECTORS AND THEIR INTERESTS

The directors who served the company during the period and up to the date of this report were:

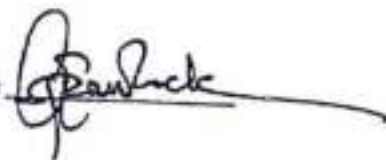
- 1.
- 2.

7. AUDITORS

PanAfrican Auditors has expressed their willingness to continue in office and is eligible for re-appointment. A resolution proposing the appointment of PanAfrican Auditors as auditors of the company will be put to the Annual General Meeting.

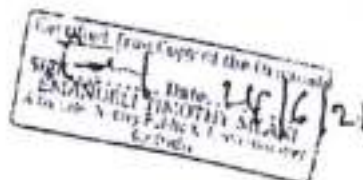
By order of the Board

Director:



Date:

3/5/2021



AZIHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Statement of Directors' Responsibilities

For the year ended 31 December 2020

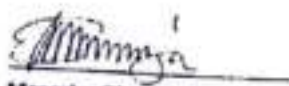
The company's directors are responsible for the preparation and fair presentation of the financial statements, comprising the Statement of Financial position as at 31 December 2020, and the statement of the comprehensive income, the statement of changes in equity and Statement of the cash flow for the year then ended, and the notes to the financial statements, which include a summary of significant accounting policies and other explanatory notes, in accordance with International Financial Reporting Standards and in the manner required by Tanzanian Companies Act.

The directors' responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of these financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

The directors have made an assessment of the company's ability to continue as a going concern and have no reason to believe the business will not be a going concern in the year ahead

Approval of the financial statements

The financial statements of the company, as indicated above, were approved by the board of directors and are signed on its behalf by


Managing Director





**Pan African
Auditors**

To the members of:
AZHAR CONSTRUCTION CO. LTD

INDEPENDENT AUDITOR'S REPORT

Opinion

We have audited the accompanying financial statements of AZHAR CONSTRUCTION CO. LTD which comprise the statement of financial position as at 31 December 2020, and the related Statement of Profit Loss and Other Comprehensive Income, Statement of Changes in Trustees' Funds and Statement of Cash flows for the year then ended, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of AZHAR CONSTRUCTION CO. LTD as of 31 December 2020, and the results of its operations and its cash flows for the year then ended in accordance with IFRS.

Managements' Responsibility for the Financial Statements

Managements are responsible for the preparation and fair presentation of these financial statements in accordance with IFRS, this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing (ISAs). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the proprietor's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

For and on behalf of Pan African Auditors

Signature: CPA R. R. R. R. R.



AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Statement of Financial Position for the year ended 31 December 2020

	Note	2020 TZS	2019 TZS
ASSETS			
Non-Current Assets:			
Property, Plant & Equipment	12	54,636,753	62,902,383
		<u>54,636,753</u>	<u>62,902,383</u>
Current Assets:			
Inventory			
Tax Asset			
Trade Receivables & Prepayments	11	-	157,950,000
Cash and Bank	8	333,484,185	286,132,510
	7	<u>356,061,359</u>	<u>444,082,510</u>
		<u>689,545,544</u>	<u>444,082,510</u>
TOTAL ASSETS EMPLOYED		<u>744,182,298</u>	<u>506,984,893</u>
EQUITY AND LIABILITIES			
Equity			
Share Capital			
Retained Profit	10	100,000,000	100,000,000
		<u>455,922,108</u>	<u>284,049,425</u>
		<u>555,922,108</u>	<u>384,049,425</u>
Non-Current Liabilities:			
Long term loan			
Current Liabilities:			
Trade and Other Payables			
Tax Payable	9	1,865,000	7,200,000
	11	<u>186,395,189</u>	<u>115,735,468</u>
		<u>188,260,189</u>	<u>122,935,468</u>
TOTAL EQUITY AND LIABILITIES		<u>744,182,298</u>	<u>506,984,893</u>



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Profit or Loss and Other Comprehensive Income
For the year ended 31 December 2020

	Note	2020 TZS	2019 TZS
Revenues	2	1,406,458,745	1,220,883,200
Direct Cost	3	(987,967,477)	(878,531,332)
Gross Profit		418,491,268	342,351,868
Administrative Expenses	4	(166,027,508)	(130,884,754)
Sales and Distribution Expenses	5	(5,205,545)	(5,479,521)
Profit from Operations		247,258,215	205,987,593
Finance Costs	6	(1,725,811)	(1,914,708)
Profit before tax		245,532,404	204,072,885
Income tax	11	(73,659,721)	(61,221,865)
Profit for the Year		171,872,683	142,851,019

The statement of the comprehensive income is to be read in conjunction with the notes to and forming part of the financial statements set out on pages 8 to 11.



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Statement of Change in Shareholders Equity
For the year ended 31 December 2020

	Share Capital	Retained Earnings	Total
	TZS	TZS	TZS
As at 1 January 2019	100,000,000	141,198,406	241,198,406
Profit for the year	-	142,851,019	142,851,019
Dividend Paid	-	-	-
As at December 2019	100,000,000	284,049,425	384,049,425
As at 1 January 2020	100,000,000	284,049,425	384,049,425
Profit for the year	-	171,872,683	171,872,683
Dividend Paid	-	-	-
As at December 2020	100,000,000	455,922,108	555,922,108



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Statement of Cash Flow

for the year ended 31 December 2020

	2020 TZS	2019 TZS
Cash flow from operating activities:		
Net operating profit/loss before tax	245,532,404	204,072,885
Adjustment for non cash items:		
Depreciation of Non-Current Assets	8,265,630	9,722,662
Operating profit/(loss) before tax	<u>253,798,034</u>	<u>213,795,547</u>
Working Capital Adjustments:		
(Increase)/Decrease in Stock	-	-
(Increase)/Decrease in Receivables	(175,534,185)	(75,997,350)
Increase/(Decrease) in Trade and Other Payables	(5,335,000)	5,545,440
Cash generated from/(used in) from operations	<u>72,928,849</u>	<u>143,343,637</u>
Income tax paid	<u>3,000,000</u>	<u>3,000,000</u>
Net cash inflow/(outflow) from operating activities	<u>69,928,849</u>	<u>140,343,637</u>
Cash flow from investing activities:		
Acquisition of Property, Plant and Equipment	-	-
Net cash inflow/(outflow) from investing activities	<u>-</u>	<u>-</u>
Cash flow from financing activities:		
Loan Repayment	-	-
Dividend	-	-
Net cash inflow/(outflow) from financing activities	<u>-</u>	<u>-</u>
Net increase/(decrease) in cash and Cash Equivalents	<u>69,928,849</u>	<u>140,343,637</u>
Cash and Equivalents at the beginning of the year	<u>286,132,510</u>	<u>145,783,873</u>
Cash and Equivalents balance at end of the year	<u>356,061,359</u>	<u>286,132,510</u>



AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Notes to the Financial Statements

For the year ended 31 December 2020

1 SIGNIFICANT ACCOUNTING POLICIES

Azhar Construction Company Limited (the "Company") is a company domiciled in Tanzania. The financial statements of the Company are for the period ended 31 December 2020.

The principal accounting policies adopted in the preparation of these financial statements are set out below:

(a) Statement of compliance

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) and its interpretations adopted by the International Accounting Standards Board (IASB).

(b) Basis of preparation

The financial statements are presented in Tanzania shillings (TZS). They are prepared on historical cost basis.

The preparation of the financial statements in conformity with IFRSs requires management to make judgment, estimates and assumptions that affects the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which forms the basis of making judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates is revised if the revision affects only that period, or in the period of the revision and future periods of the revision affects both current and future periods.

(c) Revenue recognition

Turnover, which represents the amount invoiced for services rendered, will be recognised on delivery of goods and service to customers after production commencement.

(d) Equipment and Fixtures

Items of Equipments and fixtures are stated at book value less annual depreciation (see accounting policy (e) below) and impairment losses (see accounting policy (f)).

(e) Depreciation

Items of property, plant and equipments are stated at book value cost less annual depreciation. Depreciation is provided so as to write off the cost of fixed assets on reducing balance basis. The principal annual rates used for this purpose, which are consistent with those used in prior period, are

Computer and Printers	37.5%
Equipments & Machines	12.5%
Furnitures and Fittings	12.5%



AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Notes to the Financial Statements

For the year ended 31 December 2020

(f) Impairment

The carrying amounts of the Company's assets, other than inventories are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash generating unit exceeds its recoverable amount. Impairment losses are recognised in the income statement

2. Turnover

	2020	2019
	T25	T25
Sales	1,406,458,745	1,220,883,200
	<u>1,406,458,745</u>	<u>1,220,883,200</u>

3. Cost of Sales

	2020	2019
	T25	T25
Purchases	703,229,373	610,441,600
Hiring Cost	194,139,617	182,788,454
Repair and Maintenance	90,598,488	85,301,278
Direct Cost	<u>987,967,477</u>	<u>878,531,332</u>

4. Administrative Expenses

	2020	2019
	T25	T25
Telephone, Postage & Internet	1,620,302	1,570,060
Audit and Accounting Fees	5,000,000	5,000,000
Salary and Wages	117,936,000	84,240,000
Business license	1,000,000	1,000,000
Security Charges	6,000,000	6,000,000
Office Expenses	6,350,715	5,645,080
City service Levy	571,938	366,265
Rent	12,000,000	12,000,000
Stamp Duty	120,000	120,000
SDL	5,307,120	3,790,800
Printing & Stationery	862,980	899,875
Electricity	672,511	327,718
Insurance	118,000	118,000
Water Expenses	202,312	192,294
Depreciation	8,265,630	9,722,667
	<u>166,027,508</u>	<u>130,992,754</u>

5. Sales And Distribution

	2020
	T25
Advertisement	771,332
Travelling and Accommodation	4,584,213
	<u>5,205,545</u>



Signature: [Signature]
Date: 21/12/21
For: [Signature]
AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

For the year ended 31 December 2020



Scanned with CamScanner

Financial Statements

For the year ended 31 December 2020

Property, Plant and Equipment

Classe:

At 01 January 2020

Additions

At 31 December 2020

Depreciation:

At 01 January 2020

Charge for the year

Accumulated Depreciation

Net Book Value:

At 31 December 2020

At 31 December 2019



AZHAR CONSTRUCTION COMPANY LIMITED

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

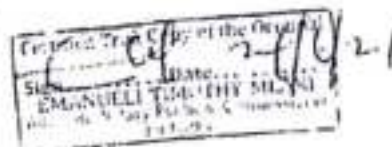
Certified True Copy of the Original
Signed: *[Signature]* Date: 21/12/2019
EMANUELE TIMOTHY MLAM
Director & Chairman
AZHAR CONSTRUCTION COMPANY LIMITED



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

For the year ended 31 December 2019

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AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Directors' Report

For the year ended 31 December 2019

The directors submit their report and the audited financial statements for year ended 31 December 2019

1. PRINCIPAL ACTIVITIES

The Principal activity of the Company is Construction

2. RESULTS

The results of the company's operations for the year are set out on page 5.

3. DIVIDENDS

During the year the company paid no dividends to Shareholders

4. SOLVENCY

The company's state of affairs at 31 December 2019 is set out on page 6. The Board of Directors considers the company to be solvent within the meaning ascribed by the Companies Act (Cap 12).

5. ADMINISTRATIVE MATTERS

The company is capable of handling all administrative matters.

6. DIRECTORS AND THEIR INTERESTS

The directors who served the company during the period and up to the date of this report were:

- 1.
- 2.

7. AUDITORS

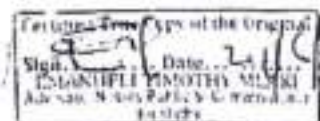
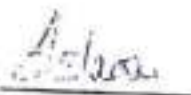
PanAfrican Auditors has expressed their willingness to continue in office and is eligible for re-appointment. A resolution proposing the appointment of PanAfrican Auditors as auditors of the company will be put to the Annual General Meeting.

By order of the Board

Director:



Date:



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Statement of Directors' Responsibilities

For the year ended 31 December 2019

The company's directors are responsible for the preparation and fair presentation of the financial statements, comprising the Statement of Financial position as at 31 December 2019, and the statement of the comprehensive income, the statement of changes in equity and Statement of the cash flow for the year then ended, and the notes to the financial statements, which include a summary of significant accounting policies and other explanatory notes, in accordance with International Financial Reporting Standards and in the manner required by Tanzanian Companies Act.

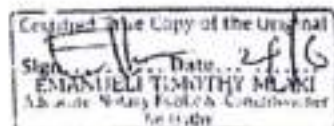
The directors' responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of these financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

The directors have made an assessment of the company's ability to continue as a going concern and have no reason to believe the business will not be a going concern in the year ahead.

Approval of the financial statements

The financial statements of the company, as indicated above, were approved by the board of directors and are signed on its behalf by


Managing Director



INDEPENDENT AUDITOR'S REPORT

To the members of:
AZHAR CONSTRUCTION CO. LTD

Opinion

We have audited the accounting financial statements of **AZHAR CONSTRUCTION CO. LTD** which comprise the statement of financial position as at 31st December 2019, and the related Statement of Profit Loss and Other Comprehensive Income, Statements of Changes in Trustees' Funds and Statement of Cash flows for the year then ended, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of **AZHAR CONSTRUCTION CO. LTD** as at 31st December 2019, and the results of its operations and its cash flows for the year then ended in accordance with IFRS.

Managements' Responsibility for the Financial Statements

Managements are responsible for the preparation and fair presentation of these financial statements in accordance with IFRS; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing (ISA). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the proprietor's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the proprietor's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

For and on behalf of Pan African Auditors


Signed by: C. P. A. Rahim M. Aze



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Statement of Financial Position
For the year ended 31 December 2019

	Note	2019 TZS	2018 TZS
ASSETS			
<u>Non-Current Assets:</u>			
Property, Plant & Equipment	12	62,902,383	72,625,045
		<u>62,902,383</u>	<u>72,625,045</u>
<u>Current Assets:</u>			
Inventory			
Tax Asset			
Trade Receivables & Prepayments	11		
Cash and Bank	8	157,950,000	81,952,650
	7	280,132,510	145,788,873
		<u>444,082,510</u>	<u>227,741,523</u>
TOTAL ASSETS EMPLOYED		<u>506,984,893</u>	<u>300,366,568</u>
EQUITY AND LIABILITIES			
<u>Equity</u>			
Share Capital			
Retained Profit	10	100,000,000	100,000,000
		284,049,425	141,198,406
		<u>384,049,425</u>	<u>241,198,406</u>
<u>Non-Current Liabilities:</u>			
Long term loan			
<u>Current Liabilities:</u>			
Trade and Other Payables			
Tax Payable	9	7,200,000	1,654,560
		115,735,468	57,513,603
		<u>122,935,468</u>	<u>59,168,163</u>
TOTAL EQUITY AND LIABILITIES		<u>506,984,893</u>	<u>300,366,568</u>

Certified True Copy of the Original
Signed:  Date: 22/12/21
EMMANUEL TIMOTHY MLAKI
Authorized Officer & Chief Executive Officer



AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Profit or Loss and Other Comprehensive Income for the year ended 31 December 2019

	Note	2019 TZS	2018 TZS
Revenues	2	1,320,883,200	1,160,561,610
Direct Cost	3	(878,531,332)	(815,604,359)
Gross Profit		<u>342,351,868</u>	<u>324,957,251</u>
Administrative Expenses	4	(130,884,754)	(117,939,934)
Sales and Distribution Expenses	5	(5,479,521)	(3,483,858)
Profit from Operations		<u>205,987,593</u>	<u>203,533,458</u>
Finance Costs	6	(1,914,708)	(1,921,450)
Profit before tax		<u>204,072,885</u>	<u>201,712,008</u>
Income Tax	11	(61,221,865)	(60,513,603)
Profit for the Year		<u>142,851,019</u>	<u>141,198,406</u>

The statement of the comprehensive income is to be read in conjunction with the notes to and forming part of the financial statements set out on pages 8 to 11.

Certified True Copy of the Original
Signed by the Director
Date: 21/6/24
EMANUELE TINSUPHY NIAKI
Director



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Statement of Change in Shareholders Equity
For the year ended 31 December 2019

	Share Capital	Retained Earnings	Total
	TZS	TZS	TZS
As at 1 January 2018	100,000,000	-	100,000,000
Profit for the year	-	141,198,406	141,198,406
Dividend Paid	-	-	-
As at December 2018	<u>100,000,000</u>	<u>141,198,406</u>	<u>241,198,406</u>
As at 1 January 2019	100,000,000	141,198,406	241,198,406
Profit for the year	-	142,851,019	142,851,019
Dividend Paid	-	-	-
As at December 2019	<u>100,000,000</u>	<u>284,049,425</u>	<u>384,049,425</u>



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Statement of Cash Flow
For the year ended 31 December 2019

	2019 TZS	2018 TZS
Cash flow from operating activities:		
Net operating profit/loss before tax	204,072,885	201,712,008
Adjustment for non cash items:		
Depreciation of Non Current Assets	9,722,662	11,553,578
Operating profit/(Loss) before tax	<u>213,795,547</u>	<u>213,265,586</u>
Working Capital Adjustments:		
(Increase)/Decrease in Stock		
(Increase)/Decrease in Receivables	(75,997,350)	(81,952,650)
Increase/(Decrease) in Trade and Other Payables	5,545,440	1,654,560
Cash generated from/(used in) from operations	<u>143,343,637</u>	<u>132,967,496</u>
Income tax paid	<u>3,000,000</u>	<u>3,000,000</u>
Net cash inflow/(outflow) from operating activities	<u>140,343,637</u>	<u>129,967,496</u>
Cash flow from investing activities:		
Acquisition of Property, Plant and Equipment		(84,178,623)
Net cash inflow/(outflow) from investing activities		<u>(84,178,623)</u>
Cash flow from financing activities:		
Proceeds from Issue of Share		100,000,000
Loan Proceed from bank		
Loan repayments		
Dividend		
Net cash inflow/(outflow) from financing activities		<u>100,000,000</u>
Net increase/(decrease) in cash and Cash Equivalents	<u>140,343,637</u>	<u>145,788,873</u>
Cash and Equivalents at the beginning of the year	<u>145,788,873</u>	
Cash and Equivalents balance at end of the year	<u>286,132,510</u>	<u>145,788,873</u>

Certified True Copy of the Original
Signed: _____ Date: 21/6/2021
EMANUELL TIMOTHY NLAU
Director/Secretary/Company Secretary



AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Notes to the Financial Statements

For the year ended 31 December 2019

1 SIGNIFICANT ACCOUNTING POLICIES

Azhah construction company Limited (the "Company") is a company domiciled in Tanzania. The financial statements of the Company are for the period ended 31 December 2019.

The principal accounting policies adopted in the preparation of these financial statements are set out below.

(a) Statement of compliance

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) and its interpretations adopted by the International Accounting Standards Board (IASB).

(b) Basis of preparation

The financial statements are presented in Tanzania shillings (TZS). They are prepared on historical cost basis.

The preparation of the financial statements in conformity with IFRSs requires management to make judgment, estimates and assumptions that affects the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which forms the basis of making judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

(c) Revenue recognition

Turnover, which represents the amount invoiced for services rendered, will be recognised on delivery of goods and service to customers after production commencement.

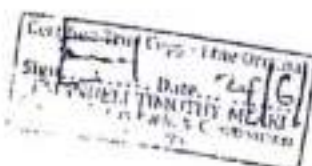
(d) Equipment and Fixtures

Items of Equipments and fixtures are stated at book value less annual depreciation (see accounting policy (e) below) and impairment losses (see accounting policy (f)).

(e) Depreciation

Items of property, plant and equipments are stated at book value cost less annual depreciation. Depreciation is provided so as to write off the cost of fixed assets on reducing balance basis. The principal annual rates used for this purpose, which are consistent with those used in prior period, are:

Computer and Printers	37.5%
Equipments & Machines	12.5%
Furnitures and Fittings	12.5%



AZHAR CONSTRUCTION COMPANY LIMITED

Financial Statements

Notes to the Financial Statements

For the year ended 31 December 2019

(f) Impairment

The carrying amounts of the Company's assets, other than inventories are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in the income statement.

2. Turnover

	2019	2018
	TZS	TZS
Sales	1,220,883,200	1,160,561,610
	<u>1,220,883,200</u>	<u>1,160,561,610</u>

3. Cost of Sales

	2019	2018
	TZS	TZS
Purchases	610,441,600	580,280,805
Hiring Cost	192,788,454	174,084,242
Repair and Maintenance	85,301,278	81,219,311
Direct Cost	<u>878,531,332</u>	<u>835,604,359</u>

4. Administrative Expenses

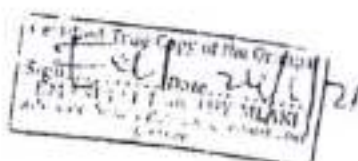
	2019	2018
	TZS	TZS
Telephone, Postage & Internet	1,570,060	234,325
Audit and Accounting Fees	5,000,000	5,000,000
Salary and Wages	84,240,000	72,000,000
Business License	1,000,000	350,000
Security Charges	6,000,000	6,000,000
Office Expenses	5,645,080	5,720,145
City Service Levy	360,265	348,168
Rent	12,000,000	12,000,000
Stamp Duty	12,000	120,000
SDL	3,790,800	3,240,000
Printing & Stationery	899,875	856,045
Electricity	377,718	216,745
Insurance	118,000	118,000

Water Expenses

	192,294	182,928
5. Depreciation	9,722,662	11,553,578
	<u>130,884,754</u>	<u>117,939,934</u>

Sales And Distribution

	2018	2019
	TZS	TZS
Advertisement	232,981	221,444
Travelling and Accommodation	5,246,540	3,262,414
	<u>5,479,521</u>	<u>3,483,858</u>



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Notes to the Financial Statements
For the year ended 31 December 2019

11. Property, Plant and Equipment

Cost/Valuation	Computer & Printers TZS	Tools & Equipments TZS	Furniture & Fittings TZS	Total TZS
<u>Classes</u>	<u>i</u>		<u>iii</u>	
At 01 January 2019	4,125,000	74,409,755	5,643,868	84,178,623
Additions	-	-	-	-
At 31 December 2019	4,125,000	74,409,755	5,643,868	84,178,623
<u>Depreciation:</u>				
At 01 January 2019	1,545,875	9,301,219	705,484	11,553,578
Charge for the year	966,797	8,138,567	617,298	9,722,662
Accumulated Depreciation	2,512,672	17,439,786	1,322,782	21,276,240
<u>Net Book Value:</u>				
At 31 December 2019	1,612,328	56,969,969	4,321,087	62,902,383
At 31 December 2018	2,578,125	65,108,534	4,938,385	72,625,045



AZHAR CONSTRUCTION COMPANY LIMITED
Financial Statements

Notes to the Financial Statements
For the year ended 31 December 2019

6. Finance Costs	2019	2018
	TZS	TZS
Bank Charges	1,914,708	1,821,450
Interest charges	-	-
	<u>1,914,708</u>	<u>1,821,450</u>
7. Cash and Bank	2019	2018
	TZS	TZS
Cash Balances	241,770,746	133,713,268
Bank Balances	4,355,764	12,575,605
	<u>246,126,510</u>	<u>146,288,873</u>
8. Trade Debtors & Prepayments	2019	2018
	TZS	TZS
Sundry Debtors	157,950,000	81,952,650
Prepayments	-	-
	<u>157,950,000</u>	<u>81,952,650</u>
9. Trade Creditors & Accruals	2019	2018
	TZS	TZS
Sundry Creditors	6,700,000	1,654,560
Accrued Expenses	500,000	-
	<u>7,200,000</u>	<u>1,654,560</u>
10. Share Capital	2019	2018
	TZS	TZS
Authorized Capital	100,000,000	100,000,000
Issued and Fully Paid Up	<u>100,000,000</u>	<u>100,000,000</u>
11. Taxation	2019	2018
	TZS	TZS
The profit/(loss) before taxation	204,072,885	201,712,008
Add Back: Depreciation	9,722,662	11,553,578
Less: Wear and Tear Allowance	213,795,547	213,265,586
Adjusted Taxable Income	9,722,662	11,553,578
Less: Loss Balance B/F	<u>204,072,885</u>	<u>201,712,008</u>
Taxable Amount	204,072,885	201,712,008
Taxation During the year	61,221,865	60,513,603
Prior year Adjustment	-	-
Balance Brought Forward	<u>61,221,865</u>	<u>60,513,603</u>
	<u>57,513,603</u>	<u>57,513,603</u>
Tax Paid during the year	3,000,000	3,000,000
Balance Carried Forward	<u>115,735,468</u>	<u>57,513,603</u>

Control Copy of the Original
Date: 24/12/2019
By: TIMOTHY SALARI
Director



M Mkawa & Associates Consultants

SHARE HOLDERS

[Faint, mostly illegible text, likely a list of shareholders or a memorandum. Some words like "I hereby declare" are visible.]

[Handwritten signature]

DF 387



AZHAR CONSTRUCTION COMPANY LTD

P.O.Box 35189,
Dar es Salaam.

Audited Financial Statements for the year ended 31 Dec 2013

Report Contents:-

1. Directors Report
2. Directors' Responsibility on Financial Statements
3. Auditor's Opinion on the Financial Statements
4. Statement of Comprehensive Income
5. Statement of Financial Position
6. Statement of Retained Earnings
7. Cash Flow Statement
8. Notes to the Financial Statement



Mazo & Associates Consultants

Old Mashi Road, Old NSIF Building 2nd Floor (adjacent to MOWASA)
P.O. Box 8326 Mashi Kilimanjaro, Tanzania

Mob: +255 787 193920 Fax: +255 422 193920

Email: info@mazo.co.tz



Verified True Copy of the Original
Sign..... Date.....
GRANTIELI TIMOTHY MUKI
Associate, Statutory Auditor & Commissioner
for Tax

I, the undersigned, do hereby certify that the above is a true and correct copy of the original document as it appears in the records of the Department of the Interior, Bureau of Land Management, at Washington, D.C.

In testimony whereof, I have hereunto set my hand and the seal of the Department of the Interior, at Washington, D.C., this 24th day of April, 1921.

Special Agent in Charge

(Signature)



3. **PRINCIPAL ACTIVITY:**

The principle activities of the company are to engage in carrying on the Business of selling animal feeds and Transport.

4. **DIRECTORS:**

The names of directors who served during the period are as follows: -

<u>Name</u>	<u>Designation</u>	<u>Nationality</u>
SHABANI M. KAPINGA	M-Director	Tanzanian
HAMIDA MOHAMMED	Director	Tanzanian

5. **RESERVES:**

The Directors propose to carry forward the balance of retained earnings amounting to T.Shs (337,479,975) /=-

6. **COMPANY PERFORMANCE:**

The operating results for the year are set out on page 5.

7. **DIVIDENDS:**

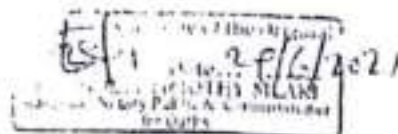
The Directors do not recommend the payment of dividends.

8. **AUDITORS:**

The Auditors, Mkawo Associates, Authorized Accountants & Auditors have expressed their willingness to continue in office. A resolution to reappoint them as auditors and to authorize the Directors to fix their remuneration will be proposed at the Annual General Meeting (AGM)

BY ORDER OF THE BOARD

DIRECTOR




AZHAR CONSTRUCTION COMPANY LIMITED

FINANCIAL STATEMENT
STATEMENT OF FINANCIAL POSITION AS AT
31ST DECEMBER, 2018

<u>ASSETS EMPLOYED</u>	<u>NOTE</u>	<u>31.12.2018</u> <u>TSHS.</u>	<u>31.12.2017</u> <u>TSHS.</u>
FIXED ASSE' NET	20	<u>30,293,237</u>	<u>46,191,751</u>

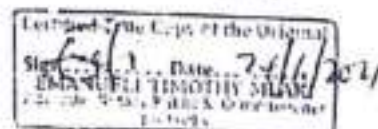
<u>CURRENT ASSETS</u>			
Stock and Stores		38,560,200	33,205,300
Sundry Debtors		102,450,000	112,405,000
Cash and Bank Balance		191,680,000	171,430,000
Total current Assets		<u>332,690,200</u>	<u>317,040,300</u>
NET ASSETS EMPLOYED		<u>362,983,437</u>	<u>363,232,051</u>

<u>EQUITY</u>			
Capital and Reserve		80,000,000	80,000,000
Retained earnings		(358,298,389)	(337,479,975)
Add Additional Capital		555,421,086	546,391,421
TOTAL EQUITY		<u>277,122,697</u>	<u>288,911,446</u>


MANAGING DIRECTOR

DATE 21/12/18

Auditors report appears on page 3
Note 1 to 10 form part of these accounts



The undersigned hereby certifies that the above is a true and correct copy of the original document as submitted to the undersigned for verification.



Certified True Copy of the Original
 Sign: *[Signature]* Date: 25/6/2021
 EMANUEL (DEPUTY MGR)
 Advocate, Solicitor, P.C. & Commissioner
 for D.O.A.

AZHAR CONSTRUCTION COMPANY LIMITED

NOTE 2.0: FIXED ASSETS

NOTES TO THE ACCOUNTS (Contd)

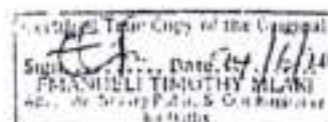
PARTICULARS	Motor Vehicle T.SHS.	Furniture & Fittings T.SHS.	Machine and Equipments T.SHS.	Computer & Accessories T.SHS.	2018 TOTAL T.SHS.
COST/VALUATION					
As at 1.1.2018	54,570,313	5,024,415	5,566,229	4,377,344	110,538,301
Addition/(Disposals)					
As at 31.12.2018	94,570,313	5,024,415	6,566,229	4,377,344	110,538,301
DEPRECIATION					
As at 1.1.2018	57,628,784	1,177,597	2,672,725	2,367,444	64,346,550
Charge for the year	13,853,073	480,852	923,376	641,213	15,898,514
As at 31.12.2018	71,481,857	1,658,449	3,796,101	3,308,657	80,245,064
NBV AS AT 31.12.2018	23,088,456	3,365,966	2,770,128	1,068,688	30,293,237
NBV AS AT 31.12.2017	36,941,529	3,846,818	3,693,504	1,709,900	46,191,751

NOTE 3: STOCKS AND STORE

Stocks and Stores in this case comprise of raw materials on site opening stock stands at Tshs 39,205,300/- and Closing stock stands at Tsh 44,560,200/-.

NOTE 4: SUNDRY DEBTORS

Sundry Debtors comprises of various customers for the construction work of which the amount have not settled as 31st December 2017 Opening balance stand at TSH 112,405,000/- Closing balance stands at Tsh 102,450,000/-



THE DIRECTOR GENERAL OF LANDS AND SURVEY
P.O. BOX 35918 DAR ES SALAAM

RE: APPLICATION FOR A CONVEYANCE

TO THE DIRECTOR GENERAL OF LANDS AND SURVEY
FROM THE DIRECTOR GENERAL OF LANDS AND SURVEY
SUBJECT: APPLICATION FOR A CONVEYANCE

IN THE MATTER OF THE LANDS ACT, CHAPTER 215 OF THE REVISED
LAW OF TANZANIA, 1967

THE DIRECTOR GENERAL OF LANDS AND SURVEY
P.O. BOX 35918 DAR ES SALAAM
TANZANIA



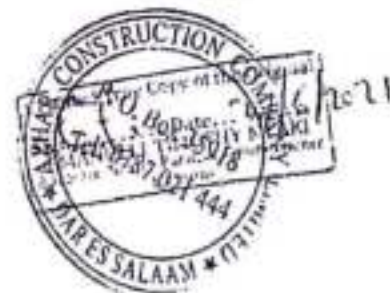
Certified True Copy of the Original
Signed: *[Signature]* Date: *22/10/2021*
EMMANUEL TIMOTHY MUKI
A Director, Survey, Public & Commercial Law
Dar es Salaam

THE DIRECTOR
 THE NATIONAL BUREAU OF STANDARDS
 P.O. BOX 35918
 DAR ES SALAAM
 TANZANIA
 TEL: 0787 021 444



**STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED
31ST DECEMBER 2018**

	CAPITAL FUND	RETAINED EARNING	TOTAL EQUITY
As at 1.1.2017	80,000,000	(330,478,260)	(250,478,260)
Net Profit /Loss As at 31 12 2017		(7,001,715)	(7,001,715)
Less: Tax Paid			
Add Addition Capital	546,477,731		546,477,731
31st December 2017	626,477,731	(337,479,975)	288,997,756
As at 1.1.2018	80,000,000	(337,479,975)	(257,479,975)
Net Profit /Loss As at 31 12 2018		(20,818,414)	(20,818,414)
Less Tax Paid			
Add Addition Capital	555,421,086	-	555,421,086
31st December 2018	635,421,086	(358,298,389)	277,122,697



AZHAR CONSTRUCTION COMPANY LIMITED

FINANCIAL STATEMENT

STATEMENT OF CASH FLOW FOR THE YEAR ENDED 31ST DECEMBER 2018

	31.12.2018	31.12.2017
	TSHS.	TSHS.
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit Before Taxation	(20 818 414)	(7 001 715)
Adjustment for the Item not Involving Movement of Funds		
Depreciation Expenses	15,898,514	24,971,571
CASH FLOW BEFORE CHANGES IN WORKING CAPITAL	(4,919,900)	17,969,856
Changes in Levels of Working Capital Items		
Increase/Decrease in Stock and Stores	(5 354 900)	(5 565 300)
Increase/Decrease in Sundry Debtors	9,955 000	20 870 000
Increase/Decrease in Sundry Creditors	7,240 135	5 820 605
Increase/Decrease in Outstanding and Accrued	4 300 000	(3 600 000)
Net Changes in levels of working capital items	16 140 235	26,525 305
CASH GENERATED FROM OPERATION	11 220 335	44 495 161
Net Flow Generated by Operations (A)	11 220 335	44 495 161
CASH FLOW FROM INVESTING ACTIVITIES		
Acquisition of Fixed Assets		
Net Cash Flow from Investment activities (B)		
Cash Flow From financing Activities (C)		
Capital additional	9 029,665	(86 310)
Long Term Loan		
Net Cash Flows for the year (A+B+C)	20 250 000	44 408,851
Cash and Cash Equivalents at the Beginning of the year	171 430 000	127 021 149
Cash and Cash Equivalents at the End of the year	191,680,000	171,430,000

MANAGING DIRECTOR

DATE



Auditors report appears on page 3
Note 1 to the financial statements

Signature of the Director
Date: 24/6/2019
Signature of the Auditor
Date: 24/6/2019

23rd June 2021

Ref: CRDB/MBD/3390/06/2021
Director General
Tanzania Agricultural Research Institute (TARI)
P.O Box 1571
Makutopora DODOMA,
TANZANIA.

Dear Sir/Madam,

REF: RECOMMENDATION LETTER INFO AZHAR CONSTRUCTION COMPANY LTD.


Please refer to the above captioned subject.

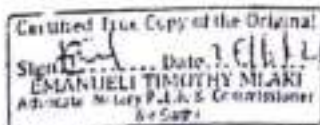
We write to introduce to you and confirm that AZHAR CONSTRUCTION COMPANY LTD is our customer maintaining current accounts Number 0150435078000 for TZS with our bank. AZHAR CONSTRUCTION CO.LTD aspires to apply for various projects.

Be further notified that their account conduct has been entirely satisfactory. This customer can access loan facility from our bank subject to fulfillment of Bank Credit terms & conditions. Kindly accord your necessary assistance as it may deem appropriate to do so.

However, this certificate is issued without any alteration or obligation on the part of the bank.

Yours faithfully,


Brigitte Bartholome
Manager Business Development.



: Ally Hussein Laay (Board Chairman), Mr. Abdulmajid M. Nsekela (Managing Director), Mr. Martin Steven Warioba (Member), Ms. Rose Felix Metta (Member), Mr. Boniface Charles Muhigi (Member), Mr. Hosea Ezekiel Kashimba (Member), Prof. Neema Munisi Mori (Member), Mr. Jes Klausby (Member), of. Faustine Karrani Bee (Member), Dr. Fred Matola Msemwa (Member), Mr. Abdul Ally Mohamed (Member), Ms. Ellen Gervas Rwigye, Mr. John Baptist gambo (Secretary)

Average Annual Construction Turnover

Minimum average annual construction turnover of TZS 5,000,000,000.00 calculated as total certified payments received for contracts in progress and/or completed within the last Three years, divided by Three years.

Year	Annual turnover data (construction only)		
	Amount Currency	Exchange Rate	TZS Equivalent
Year 1	TZS	NIL	1,200,000,000
Year 2	TZS	NIL	3,947,000,000
Year 3	TZS	NIL	4,590,000,000
Year 4	TZS	NIL	4,200,000,000
Year 5	TZS	NIL	7,200,000,000
		Average Annual Construction Turnover★	5,330,000,000

★ Total TZS for all years divided by the number of years.




Financial Situation and Performance

Financial reports for the last Three (3) years. Balance sheets, profit and loss statements and auditors' report etc.

[List below and attach copies.]

The submitted financial reports must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long term profitability. PE shall calculate the following two financial analysis ratios

- i) Average Current Ratio > 1.1
- ii) Average Debt Ratio < 0.75

In analysing the current ratios in (i) above, the trend for the latest audited financial statement must be higher than its previous financial statement

The table below should be filled by the tenderers by extracting relevant information from the financial reports. Tenderer must also submit a complete set of a general purpose financial statement which shall include i) Income statement ii) Statement of cash flow iii) Statement of financial position iv) Statement of change in Owner's equity and v) Notes to the financial statements

Type of Financial information in TZS	Historic information for previous (TZS equivalent)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of financial Position (Information from Balance Sheet)					
Total Liabilities (TL)/Total	97,613,613/=	1120,166,188/=	59,168,163	122,935,148/=	188,260,189/=
Total Equity/Net worth	519,673,412/=	532,673,763/=	541,819,755/=	675,617,621/=	695,001,650/=
Current Asset (CA)	467,360,321/=	527,371,000/=	475,618,114/=	597,116,421/=	720,115,461/=
Current Liabilities (CL)	97,623,613/=	120,166,188/=	59,168,163	122,935,148/=	113,614,321/=

[Handwritten signature]



Financial Capability

The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, line of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as **TZS 500,000,000.00 (Tanzania Shillings Five Hundred Million only)** for the subject contract (s) net of the Tenderers other commitments

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

Source of Financing	Amount (TZS Equivalent)
1. Bank CRDB	750,000,000/=
2.	
3.	

1.10 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contracted by the Employer:

Company	Account Number	Bank	Branch	Contact
Azhar Construction Co. Ltd	0150435078000	CRDB	Mlimani City	Branch Manager +255 222411047



[Handwritten signature]

AZHAR CONSTRUCTION COMPANY LIMITED

NAME, ADDRESS, TELEPHONE, TELEX AND FACSIMILE NUMBERS OF BANKERS			
S/N	NAME OF A BANKER	BANK BRANCH	ADDRESS
1	NMB Bank	Mwenge Branch	P.O. Box Mwenge,DSM Tel. Telex no.
2	CRDB UBUNGO	Ubungo Branch	P.O. Box Ubungo,DSM Tel. Telex no.



WORKING EXPERIENCES

Experience

1.2 Work performed as prime Contractor on works of a similar nature and volume over the last Five (5) years.

S/N	Project name and country	Name of client and full address	Contractors participation	Type of work performed	Year	Value of contract
1	Constructi on of office block and godowns Tanzania	M/S N4S Investment limited P.o Box 105452 Dar es Salaam	Prime Contractor	Construction of:- 1. Office block 2. Godowns	2018 -2021	4,200,000,000/=
2	Constructi on of Mbezi Beach Shopping Complex Developm ent	Jedecam Real Estate Ltd P.O.Box 25601 Dar es salaam	Prime Contractor	Construction of Mbezi Beach Shopping Complex	2017-2018	PAID ALL
3	Proposed Constructi on of Regional Office Building at Ruvuma for Prevention and Combatin g of Corruptio n Bureau – PCCB Tanzania	PCCB- RUVUMA	Prime Contractor	Construction of: Office Building	2016	1,190,040,349.66



Ref. 2016/12/Kamaka app/001

30th June, 2020

CERTIFICATE OF PRACTICAL COMPLETION

PROJECT TITLE: APARTMENT CONSTRUCTION

PROJECT MAGNITUDE: CONSTRUCTION OF SIX STOREYS APARTMENT BUILDING WITH THIRTY SIX APARTMENT OF THREE BEDROOMS AND TWO BED ROOMS

NAME OF EMPLOYER: M/S MAR-KIM CHEMICALS COMPANY LIMITED AND KAMAKA COMPANY LIMITED OF P.O.BOX 78570 DAR ES SALAAM

NAME OF CONTRACTOR: AZHAR CONSTRUCTION COMPANY LIMITED OF P.O.BOX 35196 DAR ES SALAAM

CONTRACT PRICE: Tshs. 4,590,000,000.00 (VAT INCLUSIVE)

COMMENCEMENT DATE: 10th June 2016

COMPLETION DATE: 31st August 2018

REVISED COMPLETION DATE: 30th June 2020

DEFECTS LIABILITY PERIOD: June 2020 to _____, 202__

Under the terms of the Contract dated 12/ June 2016 we certify that, subject to the completion of any outstanding items, including the items listed in the attached list, and/or making good of any defects, shrinkages and other faults, which may appear during the defects liability period, we declare that the works were practically completed on 30th June 2020.

We further declare that a certificate for one moiety of the retention money deducted under previous certificates in respect of the said works or part thereof is to be issued in accordance with the conditions of contract.

ACCEPTED AS ABOVE:



NAME: NIGELWA NGAGA DESIGNATION: DIRECTOR
(For: OPULENT LIMITED)

SIGNATURE & STAMP: [Signature] DATE: 20/01/2021

CONTRACTOR
NAME: SHIRAZI KAMUKA DESIGNATION: MANAGING DIRECTOR
(For: AZHAR CONSTRUCTION COMPANY LIMITED)

SIGNATURE & STAMP: [Signature] DATE: 20/01/2021

ISSUED BY:

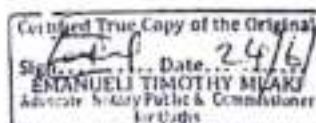
NAME: MICHAEL LOTH HEMA DESIGNATION: MANAGING DIRECTOR
(For: NH ASSOCIATES LIMITED)

SIGNATURE & STAMP: [Signature] DATE: 22/01/2021

Original to:
-MANAGING
DIRECTOR KAMUKA
COMPANY LIMITED
(CLIENT)

Original to:
-AZHAR CONSTRUCTION
COMPANY LIMITED
(CONTRACTOR)

Original to:
-NH Associates Limited
-PROJECTS GROUP LIMITED
-ZEGE CONSULTANCE LIMITED
-Geared Consulting Engineers LTD
(CONSULTANTS)



Ref. 2018/12/OPULANT/001

30th January, 2021

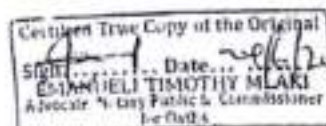
CERTIFICATE OF PRACTICAL COMPLETION

PROJECT TITLE: OFFICE AND GODOWNS CONSTRUCTION
PROJECT MAGNITUDE: CONSTRUCTION OF OFFICE BLOCK AND GODOWNS
NAME OF EMPLOYER: M/S OPULENT LIMITED OF P.O.BOX 78748 DAR ES SALAAM
NAME OF CONTRACTOR: AZHAR CONSTRUCTION COMPANY LIMITED OF P.O.BOX 35196 DAR ES SALAAM

CONTRACT PRICE: Tshs. 3,947,000,000.00 (VAT INCLUSIVE)
COMMENCEMENT DATE: 15th April 2018
COMPLETION DATE: 12th November 2019
REVISED COMPLETION DATE: 30th January 2021
DEFECTS LIABILITY PERIOD: January 2021 to 202

Under the terms of the Contract dated 15/ April 2018, we certify that, subject to the completion of any outstanding items, including the items listed in the attached list, and/or making good of any defects, shrinkages and other faults, which may appear during the defects liability period, we declare that the works were practically completed on 30th January 2021.
We further declare that a certificate for one moiety of the retention money deducted under previous certificates in respect of the said works or part thereof is to be issued in accordance with the conditions of contract.

ACCEPTED AS ABOVE:



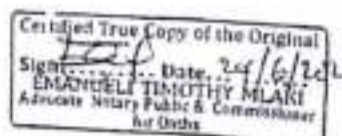
PROPOSED CONSTRUCTION OF REGIONAL OFFICE BUILDING IN RUVUMA FOR
PREVENTION AND COMBATING OF CORRUPTION BUREAU-PCCB

FINAL ACCOUNT

ADJUSTMENT OF CONTRACT SUM

S/NO	Description	Omissions Tshs	Additions Tshs
	ORIGINAL CONTRACT SUM		1,189,708,769.70
	ADD: BOQ ERRORS		331,579.96
	ADJUSTED CONTRACT SUM CARRIED TO SUMMARY (NET OF VAT)		1,190,040,349.66

PCCB - RUVUMA



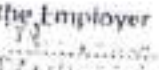


PROPOSED CONSTRUCTION OF REGIONAL OFFICE BUILDING AT RUVUMA FOR
PREVENTION AND COMBATING OF CORRUPTION BUREAU- PCCB

DRAFT FINAL ACCOUNT

We M/S AZHAR CONSTRUCTION CO. LIMITED of P.O. BOX 35918 Dar es Salaam, agree that the quantities and price shown in this Final Account are correct and that after payment to us by the Employer the amount of Tshs. 1,084,312,751.51 inclusive less Previous payments made. We shall have no further claim against the Prevention and Combating of Corruption Bureau (PCCB) out of or in connection with this contract or the execution of the works.

Employer
Signature: 
Full Name: 
Designation: 

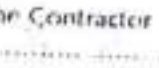

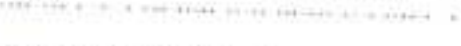
Date: 11/11/18

Witness of the Employer
Signature: 
Full Name: 
Designation: 

Date: 21/11/18

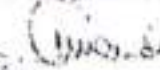
Contractor
Signature: 
Full Name: 
Designation: 

Date: 21/11/18

Witness of the Contractor
Signature: 
Full Name: 
Designation: 

Date: 21/11/18

Measured, checked and prepared by: for
and on behalf of LM Construction
Management Ltd


M. J. Lukonge
Project Quantity Surveyor

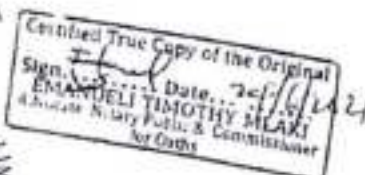
Counter checked by:

Ramani Consultants Ltd

S. Ngimbwa
Project Manager

Final Account

PCCB - RUVUMA





STUDIO LINKS ARCHITECTS

Architects project managers and interior design

P.O. Box 4269 Dar es salaam

Tel: 0754 311673

Portals

Fax

0754 311673

CERTIFICATE OF PRACTICAL COMPLETION

PROJECT TITLE: CONSTRUCTION OF MBEZI BEACH SHOPPING PLAZA & DEVELOPMENT TO BE BUILT ON PLOT NO. 182 BLOCK 'C' MBEZI AREA IN KINONDINI MUNICIPALITY - DAR ES SALAAM

EMPLOYER: ADECANI REAL ESTATE LTD

P.O. BOX 25671

Dar es Salaam Tanzania

CONTRACTOR: AZHAR CONSTRUCTION COMPANY

P.O. BOX 35918

Dar es Salaam Tanzania

Under the terms of the Work Assignment Form Signed on 10th September 2014

We hereby Certify that;

PRACTICAL COMPLETION OF WORKS WAS ACHIEVED ON 20th MARCH 2017

DEFECT LIABILITY PERIOD: 21st March 2017 to 20th March 2018.

CONSULTANTS:

Robert Kintu
(Name)

Project Manager
(Designation)

(Signature)

23/8/2020

(Date)

(For Consulting Firm)

CONTRACTOR:

Eng. Shaban Kapanga
(Name)

MD

(Designation)



(Signature)

22/8/2020

(Date)

(For Azhar Construction Company)

EMPLOYER:

The Employer should note that as from the date of issue of this Practical Completion Certificate the Contractor remains solely responsible for the insurance of works, security and Facilities Management

Mr. Kikwani
(Name)

Director

(Designation)

(Signature)

25/8/2020

(Date)

(For: Adecani Real Estate)



EMPLOYER
NAME: HARUN KASIMU DESIGNATION: MANAGING DIRECTOR
(For: N4S INVESTMENTS LIMITED)

SIGNATURE & STAMP



DATE: 30/03/2020

CONTRACTOR
NAME: SHIBAN KAPINGA DESIGNATION: M.D
(For: AZHAR CONSTRUCTION COMPANY LIMITED)

SIGNATURE & STAMP

DATE: 30/03/2020

ISSUED BY:

NAME: MICHAEL LOU HEMA DESIGNATION: MANAGING DIRECTOR
(For: NH ASSOCIATES LIMITED)

SIGNATURE & STAMP

DATE: 30/03/2020

Original for:
-MANAGING
DIRECTOR KAMAKA
COMPANY LIMITED
(CLIENT)

Duplicate:
-AZHAR CONSTRUCTION
COMPANY LIMITED
(CONTRACTOR)

Copies for:
-NH Associates Limited
-PROJECTS GROUP LIMITED
-ZEGE CONSULTANCE LIMITED
-Geared Consulting Engineers LTD
(CONSULTANTS)



Ref. 2018/01/N455/001

13th May, 2021

CERTIFICATE OF PRACTICAL COMPLETION

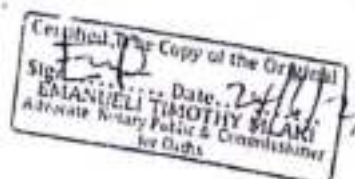
PROJECT TITLE: OFFICE AND GODOWNS CONSTRUCTION
PROJECT MAGNITUDE: CONSTRUCTION OF OFFICE BLOCK AND GODOWNS
NAME OF EMPLOYER: M/S N45 INVESTMENTS LIMITED OF P.O.BX 105452 DAR ES SALAAM
NAME OF CONTRACTOR: AZHAR CONSTRUCTION COMPANY LIMITED OF P.O.BOX 35196 DAR ES SALAAM

CONTRACT PRICE: Tshs 4,200,000,000.00 (VAT INCLUSIVE)
COMMENCEMENT DATE: 10th January 2018
COMPLETION DATE: 19th November 2020
REVISED COMPLETION DATE: 30th March 2021
DEFECTS LIABILITY PERIOD: May 2021 to 2021

Under the terms of the Contract dated 13th January 2018, we certify that, subject to the completion of any outstanding items, including the items listed in the attached list, and/or making good of any defects, shrinkages and other faults, which may appear during the defects liability period, we declare that the works were practically completed on 30th March 2021.

We further declare that a certificate for one moiety of the retention money deducted under previous certificates in respect of the said works or part thereof is to be issued in accordance with the conditions of contract.

ACCEPTED AS ABOVE:



EMPLOYER
NAME: STILLIS MARTINUS DESIGNATION: MD
(For: KAMAKA COMPANY LIMITED)

SIGNATURE & STAMP:  DATE: 30/06/2020

CONTRACTOR
NAME: S. HAZIM KAPINGA DESIGNATION: MANAGING DIRECTOR
(For: AZHAR CONSTRUCTION COMPANY LIMITED)

SIGNATURE & STAMP:  DATE: 30/06/2020

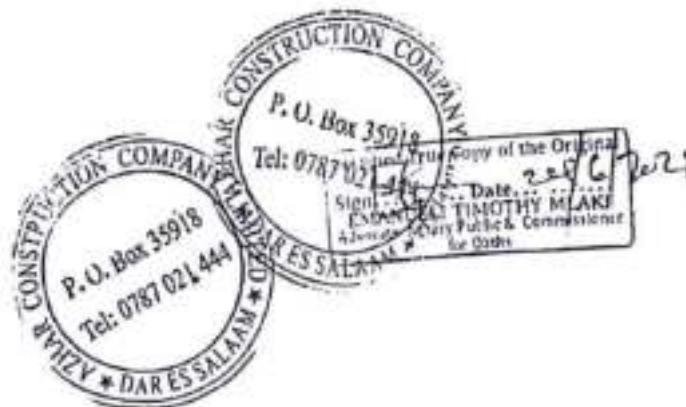
ISSUED BY:
NAME: MICHAEL LOTHE HEMA DESIGNATION: MANAGING DIRECTOR
(For: NH ASSOCIATES LIMITED)

SIGNATURE & STAMP:  DATE: 30/06/2020

Original to:
- MANAGING
DIRECTOR KAMAKA
COMPANY LIMITED
(CLIENT)

Duplicate:
- AZHAR CONSTRUCTION
COMPANY LIMITED
(CONTRACTOR)

Copies to:
- NH Associates Limited
- PROJECTS GROUP LIMITED
- ZEGL CONSULTANCE LIMITED
- Geared Consulting Engineers LTD
(CONSULTANTS)



REPUBLIC OF TANZANIA

Mbezi Beach Plot No. 734 Block C
Bagamoyo road,
P.O. Box: 33939,
Dar Es Salaam - TANZANIA

To:
Mobile: 0717-205995
Emails:
marchitect.tz@gmail.com

Date: 21st May 2019

CERTIFICATE OF PRACTICAL COMPLETION

In accordance with conditions of agreement between M/S AZHAR CONSTRUCTION COMPANY LTD and M/S SEBASTIAN KITENGULE, we certify that the

CONSTRUCTION OF KITENGULE HOSPITAL ON PLOT NO. 2271 TEGUTA DAR ES SALAAM

was handed over on the 21st May, 2019.

Hence Practical Completion

Upon Practical Completion the contract is therefore subject to Defect Liability Period of Twelve (12) months with effect from 22nd May, 2019 to 21st May, 2020.

Signed by:

Client:

Sebastian Kitengule

Name DR. SEBASTIAN KITENGULE

Position DIRECTOR

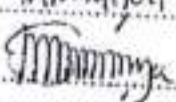
Signature 

Contractor:

Azhar Construction Company Limited

Name MR. SHARAN KAPINGA

Position MANAGING DIRECTOR

Signature 




Consultant:


Mr Architects

Name CHAKYI MWENYI

Position ARCHITECT

Signature 



Certified True Copy of the Original
Sign:  Date: 24/6/2021
EMANUEL TIMOTHY MLAKI
Advocate, Notary Public & Commissioner
for Oaths



ARCHITECTS

Consulting Architects & Project Managers

tel: +255 212 559 243 / +255 757 414 974

email: mohamed.mwamba27@gmail.com

Ghana Street, Magnam Hotel Bld,
P.O. BOX 7659 Mwanza, Tanzania

CERTIFICATE OF PRACTICAL COMPLETION

PROJECT TITLE:

CONSTRUCTION OF DOUBLE STOREY/ RESIDENTIAL BUILDING IN PLOT
NUMBER 2003 BLOCK L, KINONDONI DARUSSALAM

NAME OF EMPLOYER:

MR. ZACHARIA KAROBI (F.G.R.F) OF P.O. BOX 472 DARUSSALAM

NAME OF CONSTRUCTOR:

VZIKAR CONSTRUCTION COMPANY LIMITED

DURATION:

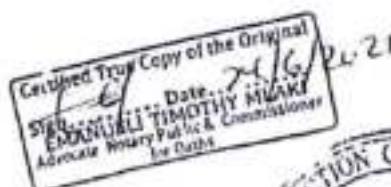
25th NOVEMBER, 2019 - 30th NOVEMBER, 2020

DEFECTS LIABILITY PERIOD:

Under the term of Contract dated, We certify that, subject to the completion of any outstanding items, including the items listed in the attached list, and/or making good of any defects, shrinkages and other faults, which may appear during the defects liability periods. We declare that the works were practically completed on

We further declare that a certificate for one moiety of the retention money deducted under previous certificates in respect of the said works or part thereof is to be issued in accordance with the condition of the contract.

ACCEPTED AS ABOVE



All correspondence should be addressed to the Managing Director



CONTRACTOR (FOR AZHAR CONSTRUCTION COMPANY LIMITED)

NAME: Eng. KAPWGA DESIGNATION: M.D.

SIGNATURE & STAMP: [Signature] DATE: 20/11/2020



EMPLOYER

NAME: BISH. Z. KAKOBE DESIGNATION: Bishop

SIGNATURE: [Signature] DATE: 20/11/2020

ISSUED BY: (FOR CONSULTANT)

NAME: MICHAEL Mwanja DESIGNATION: Director

SIGNATURE & STAMP: [Signature] DATE: 28/11/2020



All correspondence should be addressed to the Managing Director



KEY - PERSONELS

Personnel

Qualifications and experience of key personnel proposed for administration and execution of the Contract. (CVs of all key proposed key personnel are attached)

S/No.	Position	Name	Qualification	Years of Experience (General Experience)	Years of experience in proposed position
1.	Project Manager (Registered Engineer, Architect or QS)	Hussein Mohamed	Registered Civil Engineer	18	11
2.	Site Engineer (Registered Civil/ Structural Engineer)	Yusuph I Bigurube	Registered Civil Engineer	10	8
3.	Architect	Pantaleo Mohamed	Architect	8	3
4.	Quantity Surveyor	Hadija Fahmi	QS	7	5
5.	Topographic surveyor	Jumanne Ngole	Surveyor	5	5
6.	Assistant Site Engineer	Thomas Z. Kiwale	Civil Engineer	7	5
7.	Site Foreman	Gaston Gilayo	Civil Technician	27	15



[Handwritten signature]





UNITED REPUBLIC OF TANZANIA
ENGINEERS REGISTRATION
BOARD



Certificate
of Registration

(Under the Engineers Registration Act, 1997)

It is hereby certified that

Hussein Mohamed

having satisfied the requirements for registration as a

PROFESSIONAL ENGINEER

under the provisions of the Engineers Registration Act, 1997, was

registered as such on the 18th day of December, 2013

in the discipline of **Civil Engineering**

and was given registration number **3704**

Sealed and given under our hands at Dar es Salaam

this 02nd day of May, 2014

Eng. S. D. M. Miotte
Registrar

Eng. Prof. N. M. Lema
Chairman

Eng. F. Kilowoko
Board Member

Not valid without photograph of the bearer and practising Licence

Certified True Copy of the Original
Signed Date: 8/6/21
EMANUEL TIMOTHY MIAKI
Advocate Notary Public & Commissioner
for Oaths

UNIVERSITY OF DAR ES SALAAM



This is to certify

that

Hussein Mohamed

having satisfied the requirements for the award of the

DEGREE OF
BACHELOR OF SCIENCE IN CIVIL
AND STRUCTURAL ENGINEERING
WITH HONOURS,

Second Class, Lower Division

was admitted to the degree at a congregation
held in DAR ES SALAAM, on the
Twenty-Fourth day of November,
in the year Two thousand and seven

K. M. M. M. M. M.

The Chancellor



Dr. J. A. M. M. M.
Vice-Chancellor and Registrar

BSC/CSE/000135

Certified True Copy of the Original
Sign *Emmanuel Timothy Mlaki* Date *8/6/21*
EMANUEL TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

CURRICULUM VITAE

1: PERSONAL INFORMATION:

Surname: Mohamed
First Name: Hussein
Position: Civil engineer
Sex: Male (M)
Nationality: Tanzanian
Date of birth: 10th -October -1979
Place of birth: Arusha, Tanzania

2: CONTACTS:

2.1: CURRENT ADDRESS:

Postal address
C/o Arch.Hassan Rashid Mungah
P.o. Box...
Dar es salaam, Tanzania
E-mail: huseinmhd28@gmail.com
Mobile phone: +255 (714 505456 & 784 673238)

3: PROFESSIONALISM:

- Registered professional civil engineer with Tanzania engineers' registration board (ERB) with Reg. No.Peng.3704 in year 2013.

3: PROFILE:

I am eighteen (18) years experienced in civil engineering works ie. Office and Field works.

A self-motivated and hard working civil & structural engineer, able to work under pressure, being initiative and as part of a team, good in problem solving and analytical skills.

An effective communicator at all levels within an organization, dedicated to enforce and maintaining high quality standards.



Certified True Copy of the Original
Sign: *El* Date: *24/12/2021*
EMANUELI TIMOTHY ALAKI
Advocate Notary Public & Commissioner
for Oaths

3.1: EDUCATION BACKGROUND:

INSTITUTION	DURATION	AWARDS OBTAINED
University of Dar es Salaam (UDSM)	2003-2007	Bachelor of Science (Hon) in Civil and Structural Engineering. (Bsc. CE).
Old Moshi High School	2000-2002	Advanced Certificate of Secondary Education. (ACSE)
Oldadai Secondary School	1996-1999	Certificate of Secondary Education (CSE)

4. LANGUAGE AND COMMUNICATION ABILITY:

Language	Reading	Speaking	Writing
English	Very Good	Very Good	Very Good
Swahili	Very Good	Very Good	Very Good

5. WORK EXPERIENCES/ PROFESSIONAL ACTIVITIES & POSITION RECORDS

5.1. EMPLOYMENT RECORD

FROM March 2012 to Date:

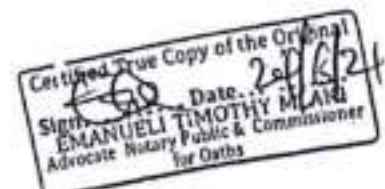
Employer: AZHAR CONSTRUCTION COMPANY LIMITED

Position: Project Manager, Civil Works Inspector, Site Agent of All Company Projects.

5.2. DETAILED TASK ASSIGNED

A: From march 2018 to March 2020

Projects: Construction of Zanzibar airport Terminal III (Passengers Terminal III Building & Apron) During this Period of Time, Azhar was Sub-Contract of PHILS International at meet time Stipulated in the contract with client project. I was working as Civil Work Inspector.



Objectives of the Assignment, roles and responsibilities

The objective of this assignment was to provide technical services in construction supervision and installation of associated items, My responsibilities were as mentioned below:-

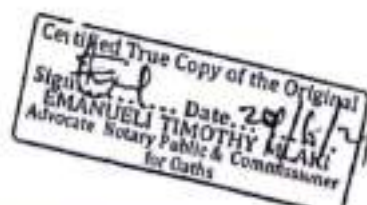
- To verify the quality & quantity of works performed by contractor as well as material used
- To verify that the works are carried out following the Quality Assurance Procedures established by the contractor and approved by the main consultant.
- To participate to the site meetings with the contractor and other project stake holders.
- To provide support to the resident engineer for the preparation of monthly progress report as well as final completion report.
- To ensure that the implementation of the project causes no negative effect to the environment.
- Supporting in Preparation and submission of the daily and weekly activities report to the Resident engineer/ project manager.
- To provide support to the Resident Engineer for the preparation/ supervision of the startup, test and commissioning procedures as well as the snag lists prior to the handing over of the project to the employer.
- Contribute to the enforcement of HSE standards by contractor during project execution.
- Contribute to the compilation of the as-built drawings to be provided by the contractor as part of handing over document to the employer.

B: From December 2015 to March 2018

Project : Extension of cement factory –a complete cement line structure.

I working as Resident engineer to this project. My daily responsibilities were

- To coordinates the issues among the project team; ie client to--design team in India--to Local consultant--to contractor on site.



- To supervise the works to ensure executed by contractor/ consultant is as per standards and specifications. ie work is done to correct line and levels and that the materials and workmanship comply with the standard and specification.
- To co-operate closely with the contractor on matter of HSE during time of project execution
- To examine together with the consultant the methods proposed by contractor for work execution : to ensure the safe means and satisfactory execution of the permanent work.
- To supervise tests carried out on site and to inspect materials supplied on compliances.
- Carrying out work measurements in agreement with contractors' staff, day works and other account for certifying the interim payment certificates
- To record the progress of work in comparison with the approved program/ schedule etc
- Records and coordinates some changes appears in the design and also faults resulting to some changes appeared during construction for easy equipment installation and as built drawing preparation.

C: From January 2014 to sept.2015

Project : Tanzania Mnazi Bay & Songo Songo Natural Gas Processing Plants and Transportation Pipeline System to Dar es Salaam.

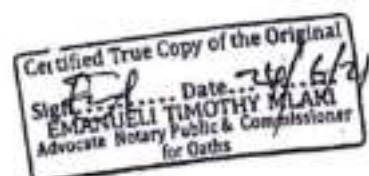
I was working with the International consulting firm (Worley Parsons RSA) in association with the local firm (AQGOLA eng. & mgt service) to supervise the construction works.

My position was **civil works inspector** in which my general responsibilities / obligation were-

- Day to day construction works supervision.
- Coordinating the ongoing work activities at site and reporting the progress to the project supervisor,
- Attend the weekly progress meeting liaising the construction matters during the meeting. Etc.

The main work items attended during the project execution were :-

- i. Clearing and grading of working site



- ii. Handling during Pipe stringing, bending and welding works
- iii. Weld quality inspection eg. (NDT for welded joint)
- iv. Cleaning up and coating of field joints
- v. Trenching- Alignment and levels control
- vi. Inspection of entire coat on pipes .(by holiday test method)
- vii. Pipe Lowering, laying of FOC (cable) and backfilling works
- viii. Hydrostatic testing of connected pipe sections.
- ix. Final tie in and pre commissioning and works
- x. Clean up and restoration of the site
- xi. Commissioning.

D: From March 2011 To December 2013

Project : Proposed New Terminal building & Apron for Zanzibar International airport

During this period I was working as a civil works inspector in the construction works including buildings, access roads and drainage system.

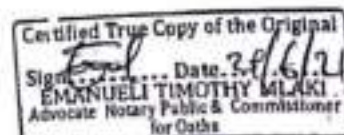
In the position of partial responsibility for all tasks and assist the project engineer but not limited to:

- ❖ Supervision of all construction stages of work
- ❖ Checking of implementation works, material submittal, mix design, method statement and risk assessments by contractor in the field.
- ❖ Management of progress, site meetings, liaison and coordinate authorities and clients, inspection of works, reviewing phasing, ensuring compliance with standards, health and safety requirements
- ❖ Issuing relevant instructions, recording and evaluating claims, monitoring testing, preparing inspection reports and keeping all records
- ❖ Coordinate with all other experts of the building projects, reporting to the employer and project director.
- ❖ Direct the contractor to take all necessary steps including those mentioned in the contract to protect the environment on and off the site which arise due to construction works

E: From July 2007 To Febr. 2011

Project : Design office works and field work supervisions

- Office works includes structural design and detailing, preparation of bar bending schedules, analysis of inventory report of existing structures, preparation of bidding documents and evaluation of tenders.



- Site works includes inspection and supervision of sites under construction to ensure that the design requirements and standards from substructures to superstructures are achieved. It includes also Inventory of existing structures which takes in examination and identification of defects on structure and structure itself which will facilitate the evaluation of the performance of the existing structure and draw recommendations.

5.3 PROJECTS RECORDS

Projects/ Works undertaken that best illustrates capability to handle the tasks assigned.

1. Project : Proposed Cement Factory Expansion
Client : Amsons Industries (T) Limited
Year /Location: 2016—2018, At Camel Cement Factory, Mbagala Dar Es Salaam

Main project features :

The factory extension project includes the complete line construction —ie. cement Grinding mill Structure 35m high, concrete and Steel structure overhead cement storage silos 2No., Load centre 4 storey building, packing plant, Hot air generation plant and limestone crusher .

Position held : project Engineer

General Activities performed at this project:

- Assist in Quality control by confirming that the construction works are undertaken to a specified alignment, levels and dimensions and to cross check whether the materials used in the construction works comply with the specification and that appropriate procedures are used.
- To coordinated the construction matters among the project construction team
- Interpret the design and guide the contractor accordingly.
- Checking Contractor's setting out of the works and carrying out inspection of the work when requested by the Contractor.
- Measure/estimate quantities of works completed, checking interim payments certificates on the basis of work completed and measured, prepare preliminary valuation of all unforeseen additional works.



- Responsible for maintaining and updating detailed site diary comprising of records of daily works executed by contractor.
- Assist the Resident Engineer in controlling of progress by confirming that the works proceeds according to agreed program and are completed within an envisaged schedule and making sure that the contractor's program is updated to reflect the actual state on site.
- Assist the Resident Engineer in preparation of consolidated monthly reports on physical and financial status, site meetings, contractual matters etc with recommendations for consideration by the Employer.

2. **PROJECT :** PROPOSED AZAM DAIRY FACTORY IN ZANZIBAR
CLIENT : AZAM DAIRY PRODUCTS LIMITED
YEAR /LOCATION: 2011-2012, AT FUMBA AREA, ZANZIBAR TANZANIA

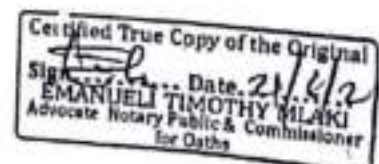
Main project features :

The factory compound project includes the factory building, 150X60X13m, Administration block, Utility building, Mosque, Garage, Canteen, Water treatment plant, internal roads and parking areas, storm water drainage system

Position held : Project engineer

General Activities performed :

- To supervise the works to check that they are executed to correct line and levels and that the materials and workmanship comply with specifications.
- To design storm water drainage system layout and sizing of channels
- To cooperate closely with the contractor on matters of safety
- To examine the methods proposed by contractor for the execution of the work, the primary object being to ensure the safe and satisfactory execution of the permanent work.
- To execute and / or supervise tests carried out on site and to inspect materials manufacture at source where this is not done by the engineers' head office staff.
- To keep a diary constituting a detailed history of the work done and of all happening at the site , and to submit periodic progress to the project manager.
- To check day works and to measure quantities of works in agreement with the contractors' staff and other accounts so that the interim and final payment could be performed.



- In the case of any work for which the contractor may claim payment as additional works, to agree with the contractor and record all relevant circumstances so as to ensure that agreement exists on matters and facts and principles.
- To record the progress of work in comparison with the programme.
- To record on drawings the actual levels and nature of all foundations, the character of the strata encountered in excavation and full detail of any deviation from drawings which may have been made during the execution of the work.

3. **PROJECT :** PROPOSED RED SOIL SCREENING PLANT
CLIENT : TANGA CEMENT COMPANY LIMITED
YEAR/LOCATION : 2010 To 2011, AT TANGA, TANZANIA

Main project features :

The main objective of the project is to separate the blasted mixture of limestone and red soil, both are on the ongoing mining operations as well as the heaped mix that has built up unused over the last thirty years or so of the quarry operations.

"SCREENING PLANT".

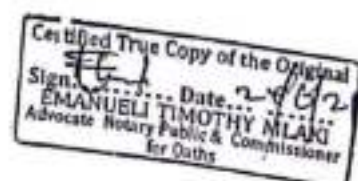
It was composed of Reinforced concrete retaining wall structure 12m high, Platform (slab 300thk) and supporting walls, Compacted earth filling works on ramp and drainage structure for storm water.

Position held : Site engineer

General Activities performed :

In this project I was working as site engineer and responsible for the following:-

- To supervise the works to check that they are executed to correct line and levels and that the materials and workmanship comply with specifications.
- To act on all correspondence in between construction site and design engineer
- To cooperate closely with the contractor on matters of safety
- To examine the methods proposed by contractor for the execution of the work, the primary object being to ensure the safe and satisfactory execution of the permanent work.
- To execute and / or supervise tests carried out on site and to inspect materials manufacture at source where this is not done by the engineers' head office staff.
- To keep a diary constituting a detailed history of the work done and of all happening at the site , and to submit periodic progress to the project manager.
-



- To check day works and to measure quantities of works in agreement with the contractors' staff and other accounts so that the interim and final payment could be performed.
- In the case of any work for which the contractor may claim payment as additional works, to agree with the contractor and record all relevant circumstances so as to ensure that agreement exists on matters and facts and principles.
- To record the progress of work in comparison with the program.
- To record on drawings the actual levels and nature of all foundations, the character of the strata encountered in excavation and full detail of any deviation from drawings which may have been made during the execution of the work.
- Preparation of 'As built drawings' and completion certificates.

4. **PROJECT: PROPOSED SIX STOREY DOUBLE RESIDENTIAL APARTMENTS**
CLIENT : KAMAKA COMPANY LIMITED
YEAR/LOCATION: 2016, PLOT NO... AT OYSTERBAY AREA

Main project features :

The proposed building was a residential apartments composed of two units of each Six (6) storey with roof terrace and swimming pools.

Position held : Structural design engineer and construction supervisor

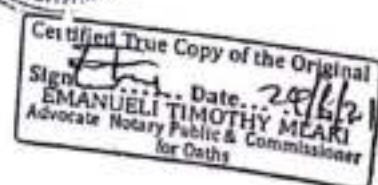
Activities performed :

- Structural analysis and design
- Preparation of detailed construction drawings
- Preparation of design report and bar bending schedules.
- Early stage construction supervision

5. **Project/Assignment : Design and construction Supervision of proposed Apartments**
Year /Location : 2007 to 2010: Plot No.2339/202/ Area II, Gerezani area, Dsm Tanzania
Client : M/s APEX Tower limited, of P.O box 267 Dsm

Main project features :

The building was proposed as residential apartments composed of
 Seven (7) storey building with basement & roof terrace.



Position held : Structural design engineer and construction supervisor

Activities performed :

- Structural analysis and designing
- Preparation of detailed drawings
- Preparation of bar bending schedules.
- Preparation of Design report.
- Construction supervision of the building including attending site meetings.
- Evaluating contract claim and preparation of payment certificates.
- Reviewing drawings during construction.
- Re-quantification of reinforcement & concrete quantities.

Some of other projects related to the above captions were:

Supervised project - Coral Beach Club DSM, six storey building with basement on Plot No 9561412, Msasani peninsula to completion stage.

Position - project inspector, supervisor in structural part.

Supervised project - Proposed four storey residential apartments with basement on plot No.437-447 (2units) at Mikocheni 'B' DSM to completion stage.

Position - Assistant design engineer & supervisor in structural part.

Supervised project - proposed two storey housing estates (12units) on plot No.133-137&140 Kingsway estate Kinondoni DSM to completion stage.

Position- Project inspector & supervisor in structural part.

Supervised project- Proposed nine storey residential apartments on plot No.79 Mathuradas Street -Upanga DSM to completion stage.

Position- Project inspector & supervisor in structural part.

Supervised project -Proposed three storey residential apartment on plot No... (3units) at Msasani beach area to completion stage.

Position - Project inspector & supervisor in structural part.



Supervised project- Proposed four storey school building for DYCCC on plot No.... at Changombe area to completion stage.

Position - Project inspector & supervisor in structural part.

Supervised project- Proposed five storey residential apartment on plot No.589, (2units) at Msasani peninsula to completion stage

Position- Project inspector & supervisor in structural part.

Design & Supervised project - Proposed six storey office block on plot No 1403/1 at Msasani peninsula to completion stage.

Position- Design engineer and construction supervisor

Supervised project- Proposed six storey apartments (2units) on plot No.857 at Msasani Beach DSM to up to date.

Position- Project inspector & construction supervisor

Design & Supervised project- Proposed four storey office & canteen on plot No.188/2 Along Changombe road DSM to completion stage.

Position- Design engineer and construction supervisor

Design & Supervised project- Propose two storey residential building on plot No.182 At Mwanza.

Position- Design engineer and detailing

Supervised project- Proposed Godowns & showrooms on plot No.112 At Kipawa industrial area DSM.

Position- Assistant design engineer & construction supervisor

Design & Supervised project -Propose two storey residential complex (20units) on plot No: 03 at Msasani area DSM

Position- design engineer and construction supervisor

Supervised project- Proposed seven storey residential developments on plot No.1111 At Msasani peninsula DSM

Position- Assistant design engineer & construction supervise

Supervised project- Proposed three storey residential developments on

plot No... At Mbasani peninsula DSM

Position- Project inspector & supervisor in structural part

Supervised project- Proposed Seventeen storey Commercial & residential developments, twin tower on plot No 478/479 At Mindu street Upanga DSM

Position- Project inspector & supervisor in structural part.

Supervised project- Proposed Sixteen storey Commercial & residential developments on plot No.1291/22 1292/22 at Mlima/Sewa street DSM

Position - Project inspector & supervisor in structural part.

Design & Supervised project- Proposed two storey show room extension (2units) on plot No.112,Kipawa industrial area.

Position- design engineer and construction supervisor

All the above mentioned projects which were office & sites oriented works were done under supervision of senior Civil & Structural Engineer. Prior to these official works, I have done also private projects, design & construction supervision in which most of them were constructed and others were in progress.

project records on Structural Inventory works i.e. *fire attacked building, old structures, and weather affected structures etc.*

Aug 2007-08: Structural inventory and detail preparation for rehabilitation of old buildings (Agakhan facilities (schools and hospitals buildings),
Position: Assistant structural engineer

March 2008: Structural inventory of Existing Bridge structures from Sumbawanga to Mpanda at Rukwa region.
Position: Assistant structural engineer

April 2008: Structural inventory, evaluation of the extent of fire damage and preparation of rehabilitation detail for the burnt structure (Sea Cliff hotel in Dar es salaam and ALAF Industry in Dar es Salaam.
Position: Assistant structural engineer



- May 2008:** Structural inventory and detail preparation for rehabilitation of old Structures for Tanzania breweries Ltd in Arusha & Dar es Salaam,
Position: Assistant structural engineer
- June 2008** Rehabilitation work for World Wide Fund for Nature Tanzania program (WWF)
Field office at Kilwa,
Task: Structural inventory, preparation of details for tender, tender evaluation and award of tender to the short listed contractor.
Position: Assistant project engineer

6.1: COMPUTER LITERACY

- Microsoft office applications
- AutoCAD,
- design excel sheet
- Prokon

7: AWARDS:

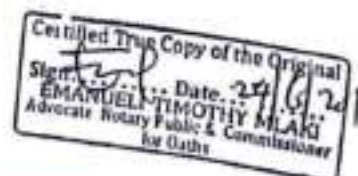
- Bachelor of Science in Civil & structural Engineering
- Advanced Certificate of Secondary Education
- Ordinary Certificate of secondary Education.

8: REFEREES:

1: Eng. S.N pendharkar
of P.O Box ...
Dar es Salaam, Tanzania.
E- mail: Pendharkar.associates.ltd@gmail.com
Mob. [+255 754 461 850](tel:+255754461850)

2: Arch.Hassan Rashid Mungah
Of P.O Box...
Dar es Salaam, Tanzania.
E-Mail:hmungah@yahoo.com
Mob.No:[+255 784 299 090](tel:+255784299090) , [+255 655 323 211](tel:+255655323211)

3 : Eng. Samwel Charles J.



1. What is the purpose of the study?
 The purpose of the study is to determine the effect of the use of the Internet on the learning of English as a second language.

2. What are the research questions?
 The research questions are: (1) What is the effect of the use of the Internet on the learning of English as a second language? (2) What are the factors that influence the learning of English as a second language?

3. What are the hypotheses?
 The hypotheses are: (1) The use of the Internet will have a positive effect on the learning of English as a second language. (2) The factors that influence the learning of English as a second language are the use of the Internet, the teacher's role, and the student's motivation.

4. What are the variables?
 The variables are: (1) Independent variable: the use of the Internet. (2) Dependent variable: the learning of English as a second language. (3) Mediating variable: the teacher's role. (4) Moderating variable: the student's motivation.

5. What are the methods?
 The methods are: (1) Qualitative method: interviews, focus groups, and document analysis. (2) Quantitative method: surveys and experiments.

6. What are the results?
 The results are: (1) The use of the Internet has a positive effect on the learning of English as a second language. (2) The factors that influence the learning of English as a second language are the use of the Internet, the teacher's role, and the student's motivation.

7. What are the conclusions?
 The conclusions are: (1) The use of the Internet is an effective tool for the learning of English as a second language. (2) The teacher's role is important in the learning of English as a second language. (3) The student's motivation is a key factor in the learning of English as a second language.

Curriculum Vitae (CV)

PERSONAL DETAILS

Surname: Mwamba
 Other names: Mohamed Pantaleo
 Date of Birth: 12th January 1977
 Marital Status: Married
 Sex: Male
 Nationality: Tanzanian
 Place of Birth: Tanga

CONTACTS

Postal Address: BOX 735 MWANZA
 Cell Phone: 0757-41 49 74; 0713-534 660
 E-mail Address: Mohamed.mwamba77@gmail.com

PROFILE

I'm reliable, creative, self-motivated and innovative with observational and analytical skills. Able to work on own initiative or as part of a team and can also deal with managerial issues and administrative works.

EDUCATION

June 2015: Professional Examination (AQRB)
 CERTIFICATE OF REGISTRATION

Professional experience Post Graduation

PERIOD	FIRM
From June 2012- to date	Arch High Tech Consult
	P.O.BOX 7567,
	Mwanza,-Tanzania

PERIOD	FIRM
From July 2006-to-Dec 2007	Mellow Architects
	P.O.BOX 423,
	Mwanza,-Tanzania

- Sept. 2001-June 2006 Five years degree program

Bachelor of Architecture
 University College of Lands & Architectural Studies
 (UCLAS)

- July 1998-May 2000 A-Level Education
 Advanced Certificate of Secondary Education
 (ACSE)
 Tanga Secondary School

Consolidated True Copy of the Original
 SIGNED: [Signature] Date: 29/11/21
 EMANUELE TIMOTHY NIAZI
 Advocate, Notary Public & Commissioner
 Pwani

- Jan. 1994-Nov. 1997 O-Level Education
Certificate of Secondary Education (CSE)
Usagara Secondary School

- Jan 1987-Sept 1993 Primary School Education
Nguvumali Primary School

Ability to work under pressure with minimum supervision
Good communication skills
Mental alertness, analytical and problem solving
Ability to work flexible hours
Self starter with attention to details
Ability to deliver on a deadline
Team player

	Understanding		Speaking		Writing
	Listening	Reading	Interaction	Production	
English	VERY GOOD	VERY GOOD	VERY GOOD	VERY GOOD	VERY GOOD
Kiswahili	Excellent	Excellent	Excellent	Excellent	Excellent

- July 2006 – Dec, 2007

Mellow Architects (MWANZA)

Position: - Architectural Asst.

Activities: - Member of the Design Team of the company.

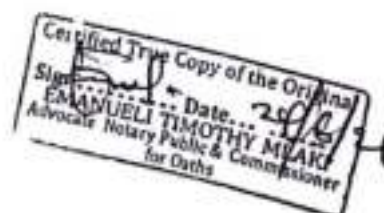
Including the design of various building, preparation
Of working Drawings, Supervision of works,
Attending site meetings, Quality and Quantity
Control of works during construction.

- Jan, 2008 to Jan 2010

Mwanza Intervention Trials Unit

NIMR - MWANZA

Position: -Clerk of Works



Project: -Complex Building Office and Lecture theatre

- Feb,2010 to June 2012
Kahama District Council
KAHAMA

Position: - Architect

Activities: - Overall in charge of the Design Team and Responsible for technically in particular design of Building from inception to implementation, quality control, Building construction monitoring & progress reports. Coordinating different actors in construction.

- July,2012 to Jan 2014
Kahama Town Council
KAHAMA

Position: -Town Architect

Activities: - Overall in charge of the Design Team of the Town Council and Responsible for technically in particular design of Building from inception to implementation, quality control & attending site meetings, Building construction monitoring & progress reports. Coordinating different actors in construction.

- Feb,2014 to date
Azhar Construction Company Limited
Position: -Senior Architect

Activities: - Overall in charge of the Design Team of the Azhar Construction Company Ltd and Responsible for technically in particular design of Building from inception to implementation, quality control & attending site meetings, Building construction monitoring & progress reports.

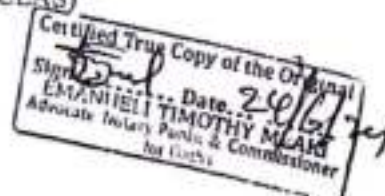
- Coordinating different actors in construction.

RESEARCH EXPERIENCE

-Final year dissertation on Architectural Contribution towards Recognitions Of Traditional Healers Activities in Tanzania for 15 weeks.

-Research Assistant on housing transformation of Keko Magunumbasi for 8 weeks

-Research Assistant on *Post Harvest Storage Facilities Research Project in Dodoma* (2006) under Institute of Human Settlements Studies (IHSS-UCLAS)



-Research on *Effect of Land use changes in Lake Victoria Transboundary River Basins on Livelihoods and Environmental Health: The case of Mara and Sio River Basins.* (2007-2008) Under Institute of Human Settlements Studies (ARDHI UNIVERSITY)

-Research on Social-Economic Survey By Using focus group discussions: *The case of Mara Region.* (2007-2008) Under Institute of Human Settlements Studies (ARDHI UNIVERSITY)

CERTIFICATION:

I, the undersigned, certify that to the best of my knowledge and belief, these bio-data correctly describes my qualification, experience, and myself.

Signature.....



1. Prof. Saidi Kapiga
DIRECTOR MITU-NIMR
P.O.BOX 11936
MWANZA
Tel: +255 28 2503275, +255 28 2502203
Fax: +255 2500019
Mobile: 0756 - 774688

2. Dr. A.M.Makale
Principal Researcher
Institute of Human Settlements Studies (IHSS)
P.O.BOX 35175
DAR ES SALAAM

Phone No. 0784-257030,
0755-858848



1. Name: [illegible]
2. Address: [illegible]
3. City: [illegible]
4. State: [illegible]
5. Zip: [illegible]
6. Phone: [illegible]
7. Email: [illegible]
8. Date: [illegible]



The National Examinations Council of Tanzania



Certificate of Secondary Education

This is to certify that **MOHAMED PANTALEO**

Index No. 50345-0242

sat for the Certificate of Secondary Education Examination

at **USAGARA SECONDARY SCHOOL**

in **NOVEMBER 1997**

and qualified for the award of a

CERTIFICATE OF SECONDARY EDUCATION

in Division **ONE**

after attaining the following performance:-

Subject	Grade
CIVICS	B (PASS)
HISTORY	C (PASS)
GEOGRAPHY	C (PASS)
KISWAHILI	B (PASS)
ENGLISH LANGUAGE	C (PASS)
PHYSICS	A (PASS)
CHEMISTRY	A (PASS)
BASIC MATHEMATICS	C (PASS)



Not valid without a hologram.
This is a security document using
special ink on paper.
Hold this document to the light
to verify a Glitter can be seen
through the paper.

Certified True Copy of the Original
Sign..... Date.....
EMANUELI TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

[Signature]
Executive Secretary

CS No 348493

[Signature]
Chairman





THE NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

Index No. 30156/0559 - MOHAMED PANTALEO

at TANGA SECONDARY SCHOOL

sat for 2000 ADVANCED CERTIFICATE OF SECONDARY
EDUCATION EXAMINATION

and obtained the following results

Subject	Result
GENERAL STUDIES	S (SUBSIDIARY)
PHYSICS	U (PRINCIPAL)
CHEMISTRY	E (PRINCIPAL)
ADVANCED MATHEMATICS	D (PRINCIPAL)

Total No. of Subjects sat *FOUR* and Passed *FOUR*

Number of Points:-13 Division *THREE*

3. The National Examinations Council of Tanzania reserves the right to correct the information given on results slips which will be confirmed by the issue of certificates.

289551



Certified True Copy of the Original
Signed... Date... 21/6/2021
EMMANUEL TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

THE UNIVERSITY OF DAR-ES-SALAAM

ACADEMIC PERFORMANCE IN FIRST DEGREE COURSES

SURNAME	FIRST NAMES	BIRTH DATE	MARITAL STATUS	SEX	CITIZEN OF	REG. NO.
PATRALIO	MOJIBED	03/01/1977	SINGLE	M	TANZANIA	34136/T-2001
HOME ADDRESS P.O. Box 5048, TANZA			PARENT/GUARDIAN'S NAME AND ADDRESS ALTY PATRALIO MOJIBED (BROTHER) Box 5048, TANZA University of Dar-es-Salaam			
DEGREE COURSE BACHELOR OF ARCHITECTURE			DATE OF ENTRY 2001			

THE UNIVERSITY OF DAR-ES-SALAAM
P.O. Box 35091
DAR-ES-SALAAM

EXAMINATION RESULTS (CONTINUED)

EXAMINATIONS RESULTS

B. Architecture 1st Year Examinations, 2001/2002

DE 1001 Development Perspectives I	B+
AR 1211 Building Technology I	B+
LA 1061 Communication Skills	B+
AR 1111 Design Studio I	C
DE 1011 Development Perspectives II	B+
AR 1221 Building Technology II	B+
AR 1411 Environmental Science I	C
AR 1311 History & Theory of Architecture I	B
AR 1121 Design Studio II	C
IT 1021 Industrial Training	B

Results: PASS

B. Architecture 2nd Year Examinations, 2003/2004

AR 3331 History & Theory of Architecture III	C
AR 3251 Building Technology IV	B+
AR 3751 Building Economics II	B+
AR 3721 Professional Practice II	B+
AR 3131 Design Studio V	B+
AR 3261 Building Technology VI	C
AR 3611 Settlement Planning II	B
AR 3161 Design Studio VI	B
IT 3631 Industrial Training	B+

Results: PASS

B. Architecture 4th Year Examinations, 2004/2005

AR 4021 Urban Development and Housing	B
AR 4161 History and Theory of Architecture IV	B
AR 5251 Building Technology VII	B
AR 4631 Urban Design	B+
AR 4371 Design Studio VII	B+
AR 4041 Architectural Science	A
AR 4921 Research Methods	A+
AR 4731 Professional Practice IV	C
AR 4181 Design Studio VIII	B+
IT 4641 Industrial Training	B

Results: PASS

B. Architecture 5th Year Examinations, 2005/2006

AR 5121 Dissertation Part I	B+
AR 5111 Design Studio IX	B+
AR 5131 Dissertation	C

G.P.A.: 3.0

B. Architecture 2nd Year Examinations, 2003/2003

AR 3231 Building Technology III	B
AR 3221 History & Theory of Architecture	B
AR 2421 Environmental Science II	B+
AR 2111 Design Studio III	C
AR 2431 Building Technology IV	C
AR 2731 Professional Practice III	B
AR 2741 Building Economics I	B+
AR 2811 Settlement Planning I	B+
AR 2121 Design Studio IV	C
IT 2621 Industrial Training	B+

Results: PASS

B. Architecture 3rd Year Examinations, 2003/2004

AR 3331 History & Theory of Architecture III	C
AR 3251 Building Technology IV	B+
AR 3751 Building Economics II	B+
AR 3721 Professional Practice II	B+
AR 3131 Design Studio V	B+
AR 3261 Building Technology VI	C
AR 3611 Settlement Planning II	B
AR 3161 Design Studio VI	B
IT 3631 Industrial Training	B+

Results: PASS

B. Architecture 4th Year Examinations, 2004/2005

AR 4021 Urban Development and Housing	B
AR 4161 History and Theory of Architecture IV	B
AR 5251 Building Technology VII	B
AR 4631 Urban Design	B+
AR 4371 Design Studio VII	B+
AR 4041 Architectural Science	A
AR 4921 Research Methods	A+
AR 4731 Professional Practice IV	C
AR 4181 Design Studio VIII	B+
IT 4641 Industrial Training	B

Results: PASS

B. Architecture 5th Year Examinations, 2005/2006

AR 5121 Dissertation Part I	B+
AR 5111 Design Studio IX	B+
AR 5131 Dissertation	C

G.P.A.: 3.0

Results: ACHIEVED CLASS HONOURS, LOWER DIVISION



Certified True Copy of the Original
Signed: EMANUELI TIMOTHY MARI
Advocate Notary Public & Commissioner
for Dar-es-Salaam
Date: 2-11-2021

CERTIFIED AS A TRUE COPY
OF THE ORIGINAL

The Chief Academic Officer
University of Dar-es-Salaam
P.O. Box 35091
DAR-ES-SALAAM

CURRICULUM VITAE

PERSONAL DETAILS

Surname : FAHMI
First name : HADIJA
Date of birth : 13th April, 1989
Marital status : Married
Sex : Female
Nationality : Tanzanian

PERSONAL CONTACTS

EMAIL : qs.fahmi@gmail.com
ADDRESS : P.O Box 11746 DSM
MOBILE : +255672524870/686385348

ACADEMIC QUALIFICATIONS

HIGHER EDUCATION (2014 to 2016)

PLACE : ARDHI UNIVERSITY (Dar es Salaam)
AWARD : Master of Science in Construction Economic and Management (Msc.CEM)

HIGHER EDUCATION (2010 to 2014)

PLACE : ARDHI UNIVERSITY (Dar es Salaam)
AWARD : Bachelor of Science in Building Economics (Bsc.BE)

ADVANCE LEVEL EDUCATION (2008 to 2010)

PLACE : Dodoma High School (Dodoma)
AWARD : Advanced Certificate of Secondary Education

ORDINARY LEVEL EDUCATION (2004 to 2007)

PLACE : Kibasila Secondary School (Dar es Salaam)
AWARD : Certificate of Secondary Education

PRIMARY EDUCATION (1997 to 2003)

PLACE : Mwl Nyerere Primary School (Dar es Salaam)
AWARD : Certificate of Primary Education

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Sign: [Signature] Date: 22/6/21
EMMANUEL TIMOTHY MIAKI
Advocate Notary Public & Commissioner
for Oaths

- Computer literacy program undertaken at the institute.
 - Microsoft word
 - Microsoft excel
 - Microsoft power point
 - Microsoft Access
 - Internet

- INDUSTRIAL TRAINING 1 (July,2011 – September,2011)
 PLACE : TANZANIA BUILDING AGENCY (Dodoma)
 WORK : Building Construction Works
- INDUSTRIAL TRAINING 2 (July,2012 – September,2012)
 PLACE : NORDIC CONSTRUCTION COMPANY LTD (Dar es Salaam)
 WORK : Building Construction Works
- INDUSTRIAL TRAINING 3 (July,2013 – September,2013)
 PLACE : NORDIC CONSTRUCTION COMPANY LTD (Dar es Salaam)
 WORK : PROFESSIONAL WORKS

EMPLOYER: Construction Cost Advisor Co. Ltd
 Dar es Salaam
 DURATION: 2014 - 2015
 POSITION: Assistant Quantity Surveyor

MAIN RESPONSIBILITIES;

- Pricing the Bill of Quantities
- Prepare Claim Certificate
- Site Inspection
- Taking off quantities
- Attending site meetings
- Conducting Re-measurement of work executed
- Prepare program of work

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 Signed: *[Signature]* Date: 22/6/21
 EMANUELI TIMOTHY M. LAKI
 Advocate Notary Public & Commissioner
 for Oaths

EMPLOYER: Dezo Civil Contractor Co. Ltd Dar es Salaam
DURATION: 2015
POSITION: Assistant Quantity Surveyor

MAIN RESPONSIBILITIES;

- Pricing the Bill of Quantities
- Prepare Valuation Certificates
- Site Inspection
- Taking off Quantities
- Attending Site Meeting
- Re-measurement of Work Executed
- Prepare Program of work
- Project Value Management
- Cost Control

EMPLOYER: Azhar Construction Company Ltd- Dar es Salaam
DURATION: 2015 Up to Date
POSITION: Senior Quantity Surveyor

MAIN RESPONSIBILITIES;

- Pricing the Bill of Quantities
- Prepare Valuation Certificates
- Site Inspection
- Taking off Quantities
- Attending Site Meeting
- Re-measurement of Work Executed
- Prepare Program of work
- Project Value Management
- Cost Control
- Project Manager Coordinator
- Report Preparation
- Raise Claims
- Review of design and BOQ
- Effective Supervision and timely Implementation of the Project
- Planning of Resources
- Preparing of Schedule of Materials including details Regarding quantities of Required Materials
- On-going Cost Analysis of Maintenance and Repair work
- Feasibility Studies for Client Requests
- Allocating upcoming Work to Subcontractors

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Signed... Date... 22/12/2017
EMANUEL TIMOTHY MLAKI
Advocate, Notary Public & Commissioner
for Oaths

PROJECT PARTICIPATED

- Proposed Construction of Cooling Tower Offices Building at East Coast-Temeke Municipality
- Proposed Construction of Twelve star apartment at Kinondoni Municipality
- Proposed Construction of High bury tower building at Kinondoni Municipality
- Proposed Rehabilitation of Royal soap and detergent industry -office building.
- Proposed Repair work at Drinks area A-One industrial Area Vingunguti
- Proposed Rehabilitation of National Insurance Corporation (NIC) Branches(Sumbawanga)- Rukwa
- Proposed Construction of Bag cement parking warehouse at Nyati cement industry – Temeke Municipal
- Proposed Rehabilitation of Agu-khan Hospital building at Dar es salaam region
- Proposed Construction of Gas plant power house – Ilala Municipal
- Proposed upgrading of existing Dar es salaam Serena Hotel Situated along Ohio street , Dar es salaam –Tanzania – Ilala Municipal
- Routine maintenance, spot improvement and culvert work along dosidosi – dongo road- (Tarura project) – Kiteto Manyara

PROFFESIONAL MEMBERSHIP

- Member of Tanzania Institute of Quantity Surveyors (TIQS).
- Registered as Graduate Quantity Surveyors by AQRB
- Registered as Quantity Surveyors by AQRB

CERTIFICATE RECEIVED

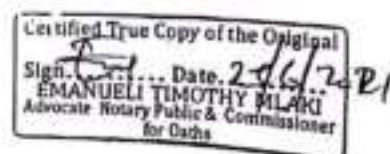
Vice-Chancellor's award certificate of leadership for 2013/2014

LANGUAGES

- English
- Kiswahili

OTHER QUALIFICATION

- Project team leader
- Entrepreneurship
- Advisor for all matter of construction field



HOBBIES

Reading, studying, watching television, travelling and cherish with different kinds of people, sports and working with computer.

REFEREES

Mwanahija Bakari (Reg. Quantity Surveyor)

E-mails: bakarimwanahija@gmail.com

Phone no. 0657173135

Dar es Salaam, Tanzania.

Kezilahabi Wasiwasi (Reg. Quantity Surveyor)

Phone no. 0784666094

Dar es Salaam, Tanzania

Dr. Geraldine John Kikwasi (Reg. Quantity Surveyor)

Ardhi University

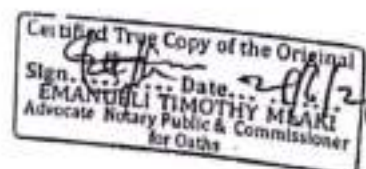
Email: jkikwasi@am.ac.tz

Phone no. 0754263235

Dar es Salaam, Tanzania

DECLARATION

I, FAHMI, Hadija hereby declare that to the best of my knowledge, the information given above is true and correct



ARDHI UNIVERSITY



This is to certify

that

Hadija Fahmi

having satisfied the requirements for the award of the

**BACHELOR OF SCIENCE
IN BUILDING ECONOMICS**

Lower Second

was admitted to the degree at a congregation
held in DAR ES SALAAM, on the

Tenth day of December,

in the year Two Thousand and Fourteen

John B. Mwakima

Vice Chancellor



Samanga

Deputy Vice Chancellor
(Academic Affairs)

BSBE 000466

BSBE/STAD/01/2008

Certified True Copy of the Original
Sign *Emmanuel Timothy Mlaki* Date *22/6/24*
EMMANUEL TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

ARDHI UNIVERSITY



This is to certify

that

Hadija Fahmi

having satisfied the requirements for the award of the

MASTER OF SCIENCE IN CONSTRUCTION ECONOMICS AND MANAGEMENT

was admitted to the degree at a congregation
held in DAR ES SALAAM, on the

Third day of December.

in the year Two Thousand and Sixteen

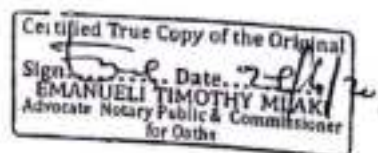
John B. Mwakima
Vice Chancellor



Samirga
Deputy Vice Chancellor
(Students Affairs)

MISCEN 000125

RD-2001-01-010



The National Examinations Council of Tanzania



Advanced Certificate of Secondary Education

This is to certify that **HABIBA FAKILI**

Index No. 00302-0045

sat for the Advanced Certificate of Secondary Education Examination
at MCHENI SECONDARY SCHOOL in FEBRUARY 2011

and qualified for the award of an

ADVANCED CERTIFICATE OF SECONDARY EDUCATION

in Division TWO

after attaining the following performance:-

Subject	Grade
GENERAL STUDIES	B (PASSED)
SECURANT	D (PASSED)
ADVANCED MATHEMATICS	D (PASSED)
ECONOMICS	E (PASSED)

Chairperson
Chairperson

Executive Secretary
Executive Secretary

This is a secure document using
watermark paper. It is not to be
used for any other purpose. It is
not to be used for any other purpose.
It is not to be used for any other purpose.
It is not to be used for any other purpose.

KCIS 0010600



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Sign... Date...
EMANUEL TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

The National Examinations Council of Tanzania



Certificate of Secondary Education

This is to certify that **HADIJA FAHRI**

Index No. **50316-0062**

sat for the Certificate of Secondary Education Examination

at **KIBASILA SECONDARY SCHOOL**

in **OCTOBER 2007**

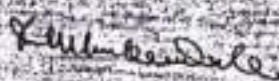
and qualified for the award of a

CERTIFICATE OF SECONDARY EDUCATION

in Division **THREE**

after attaining the following performance:-

Subject	Grade
CIVICS	D (PASS)
HISTORY	D (PASS)
GEOGRAPHY	D (PASS)
KISWAHILI	C (PASS)
ENGLISH LANGUAGE	D (PASS)
PHYSICS	C (PASS)
CHEMISTRY	B (PASS)
BIOLOGY	C (PASS)
BASIC MATHEMATICS	C (PASS)


Chairperson




Executive Secretary

Not valid without a hologram.
This is a secure document using
special ink and paper.
Hold this document to the light
to verify a Glitter can be seen
through the paper.

CS No **0633084**

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Signed..... Date **22/6/24**
EMANUELI TIMOTHY MEAKO
Advocate Notary Public & Commissioner
for Oaths

COLLEGE REG. NO:160988



This is to certify

Hadija Safini



From July 2010 to October 2010

He/ She attained the following Performance:-

PROGRAMS	GRADE
Introduction to Computer	A
Ms. Word	A
Ms. Excel	B
Ms. Access	A
Ms. Power Point	A
Ms. Publisher	A

Training Co-ordinator
Date 17/2/2010

Principal
THE GREEN INTERNATIONAL COLLEGE
Date: 10 DEC. 2010



Certified True Copy of the Original
 Sign. [Signature] Date 2/1/2022
 (NAME) TERRY MIAMI
 Attorney at Law, P.A. & Counselors, P.C.
 for Uther

ARDHI UNIVERSITY

STUDENTS' AFFAIRS



Certificate of Leadership

This is to certify that

FAHMI, HADIJA

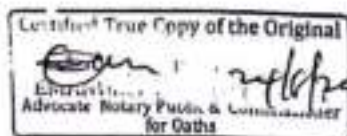
Has successfully completed her term of office at this University as ARUSO
MINISTER, ACADEMIC AFFAIRS

For 2013/2014 Academic year

Dean of Students

Vice Chancellor

Date: 6th June, 2014



CURRICULUM VITAE (CV)**PERSONAL PARTICULARS:**

NAMES : JUMANNE NGOLE
SEX : MALE
DATE OF BIRTH : 8TH OCTOBER 1986
PLACE OF BIRTH : RUVUMA REGION
NATIONALITY : TANZANIAN
MARITAL STATUS : MARRIED
ADDRESS : P.O.BOX 6327 BUNJU 'A', DAR ES SALAAM
EMAIL ADDRESS : ngoleslaw4@gmail.com
PHONE CONTACT : +255713043345, +255786805400, +255743366827

PROFILE:

- Knowledgeable in conducting and managing various projects.
- Knowledgeable in Application software such as AutoCAD, Quantum GIS, Cadpro, Csc3 and ArcGIS also surveying equipment such as Differential GPS, Total Station, Level Machine and Hand Held GPS.
- Capable in leadership and teamwork abilities.
- Able to accept challenges and discover possible solutions.
- Ability for self initiative and creativity with minimal supervision.

PROFESSIONAL EXPERIENCE:

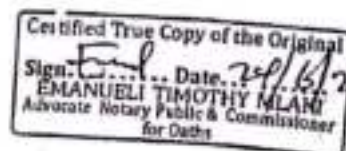
- Setting out of foot paths, driveways and gardens at Pwani Mchangani Zanzibar in the Hotel Construction project.
- Data processing and drawing of Alignment, Topographical survey plans and Profiles (120 kilometers) for the Rehabilitation and improvement of water supply system project at Kidutani Zanzibar, Tanzania.
- Detail, Canal Alignment and Topographical Survey of 307 Ha in Expanding Rice Production Project at Msolwa Ujamaa Village, Kilombero Distric, Morogoro Region.



- Cadastral Survey of 1,300 plots at Nyandoto Area, Tarime Township, Mara Region using Kolida K5 Plus Differential GPS and its office work (File compilation).
- Data processing and drawing of Alignment, Topographical survey plans, Profiles and Cross-Sections for the water project in 32 villages at Tabora, Tanzania.
- Cadastral Survey of 4,000 plots and Squatter Upgrading of 2000 plots at Mkata, Handeni District Tanga Region using Kolida K5 Plus Differential GPS.
- Topographic Survey of 222.37 acres at Lake Cement Company, Kimbiji Kigamboni District, Dar es salaam, using Kolida K9T Differential GPS.
- Cadastral Survey (Squatter) of 1,300 plots at Bagala, Babati Region using South Differential GPS.
- Cadastral Survey (Squatter) of 102 plots at Goba Mtambani, Ubungo Municipality- Dar es salaam City using Kolida K9T Differential GPS.
- Topographical Survey covering 67 Acres at Mkuranga for the preparation of Master Plan of the area, using Kolida K9T Differential GPS.
- Topographical and Cadastral Survey of two Industrial Plots to be built at Mtego wa Simba Village, Morogoro Region, using Kolida K9T Differential GPS.
- Topographical Survey of an area where Lodges and Campsite to be built at Serengeti National Park (Lake Magadi) using Kolida K9T Differential GPS.
- Topographic Survey of 4.6 hectares at Bwejuu, Southern Zanzibar, using Kolida K9T Differential GPS.
- Boundary Recovery and Topographical Survey of plot no 83 Msasani, Dar es salaam, using Kolida K9T Differential GPS.
- Boundary Recovery Survey of Plot no 341C/ 1 and 340 Oysterbay, Dar es salaam, using Kolida K9T Differential GPS.
- Boundary Recovery and Bungalows setting out Survey of Beach Plot no 1, Kibugumo area, Temeke Municipality, Dar es salaam Region, using Kolida K9T Differential GPS.
- Topographic Surveying of 12 acres at Kisenivule Mkuranga District, Coast Region, using Kolida K9T Differential GPS.
- Topographic Survey and setting out an ablution block at Njombe Bus Stand (New Bus Stand), Njombe Region using Kolida K9T Differential GPS.

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 Sign. *E.T.* Date *20/6/2021*
 EMANUELI TIMOTHY MLAKI
 Advocate Notary Public & Commissioner
 for Oaths

- Cadastral Survey of 95 plots at Goba, Kinondoni Municipality, both site and office works to the final approval at the Ministry of Lands, Housing and Human Settlement Development.
- Cadastral Survey of 835 plots at Mandewa Urban, Singida Municipality both site and office works to the final approval at the Ministry of Lands, Housing and Human Settlement Development.
- Cadastral Survey of 500 plots at Chanika Msongola, Ilala Municipality Dar es salaam both site and office works to the final approval at the Ministry of Lands, Housing and Human Settlement Development.
- Topographical and detail survey of 513.860 Acres at Kazimzumbwi village, Kisarawe District, Coast Region using Kolida K9T Differential GPS.
- Setting out of a 6,290 hectares dam to be constructed at Luhila village in Songea region using Kolida K9T Differential GPS.
- Working as a surveyor with World Map Consultants Limited at Babati in Manyara region in the surveying of 4,000 plots using Geomax Differential GPS.
- Cadastral Surveying (Surveying of 400 plots) and detail surveying at Mvomero District, Morogoro Region using Kolida K9T Differential GPS.
- Work with University of Dar es salaam / Survey Department at Zinga, Bagamoyo District in the project of EPZA (Export Processing Zone Authority).



ACADEMIC AND PROFESSIONAL QUALIFICATIONS:

YEAR	PLACE	QUALIFICATION
2009/2013	ARDHI UNIVERSITY	BACHELOR OF SCIENCE IN GEOMATICS
2007/2009	AZANIA SECONDARY SCHOOL	ADVANCED LEVEL SECONDARY EDUCATION
2003/2006	AZANIA SECONDARY SCHOOL	ORDINARY LEVEL SECONDARY EDUCATION

LANGUAGE EXPERIENCE:

	Swahili	English
SPEAKING	EXCELLENT	Good
WRITING	EXCELLENT	EXCELLENT
READING	EXCELLENT	EXCELLENT

GENERAL INFORMATION

INTEREST :

- Reading Newspaper, Magazines, Travelling, reports and journals
- Socializing, surfing in internets, participating in group discussion on Pertaining various issues, travelling (tours)

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Sign. *[Signature]* Date. *24/6/2024*
EMANUELI TIMOTHY MLANI
Advocate Notary Public & Commissioner
for Oaths

ARDHI UNIVERSITY



This is to certify

that

Jumanne Ngole

having satisfied the requirements for the award of the

BACHELOR OF SCIENCE IN GEOMATICS

Lower Second

was admitted to the degree at a congregation
held in DAR ES SALAAM, on the

Thirtieth day of November,

in the year Two Thousand and Thirteen

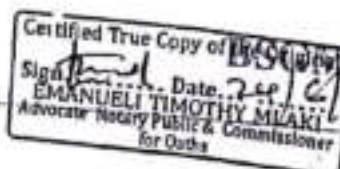
John B. Makere

Vice Chancellor



Stanega

Deputy Vice Chancellor
(Academic Affairs)



000261

INSTITUTION OF SURVEYORS OF TANZANIA

IST



This is to certify that

Jumanne Ngole


was admitted as a

GRADUATE MEMBER


of the

Institution of Surveyors of Tanzania

on the 03rd day, of the
month of November in the year 2016


Martins W. L. Chodata
President




Sebastian K. Behwa
Secretary General

Certified True Copy of the Original
Sign Emanuel Timothy Mwangi Date 28/11/2021
EMANUELI TIMOTHY MWANGI
Advocate, Notary Public & Commissioner
for Oaths

ENGINEERS REGISTRATION BOARD
TANZANIA



Certificate
of Registration

(Under the Engineers Registration Act, 1997)

It is hereby certified that

Yusuf L. Sigurube

has been admitted for registration as a

PROFESSIONAL ENGINEER

under the provisions of the Engineers Registration Act, 1997, was

registered on the 20th day of December 2012

in the discipline of **CIVIL engineering**

and was given registration number **3475**

Signed and given to him our hands at Dar es Salaam

on 31st day of December 2012


Registrar


Chairman


Board Member

"Not valid unless countersigned by the Registrar and the Chairman"



Emb. 24/1/21

YUSUPH IMAN BIGURUBE
P.O Box 47 Ngara-Tanzania

YB

PROFILE

Career summary: A resourceful civil engineer who is vastly experienced in engineering design from the initial conceptual stage, through feasibility study and to detailed design. Physically fit and able to work on-site and at remote locations, am more than willing to undertake any work of a technical nature that falls within his ability and competence. I have a solid record of health, safety and environmental focus when working on projects, and am committed to his personal and professional development. Right now am looking for a suitable position with a forward thinking company. A well presented and articulate person who works in a thorough and committed manner.

PERSONAL INFORMATION

Date of Birth:	29 th December 1978
Place of Birth:	NGARA - Tanzania
Nationality:	Tanzanian
Passport No:	AB 242273
Sex:	Male
Marital Status:	Married
Language:	English and Swahili
Mobile no:	0754 530396 / 0788 729925 / 0718 925259
Email:	ybigurube@yahoo.com

TRAINING AND QUALIFICATIONS

KAMPALA INTERNATIONAL UNIVERSITY- DAR ES SALAAM CAMPUS
MBA-SUPPLY PROCUREMENT

I have completed the course work now am writing the dissertation

UNIVERSITY OF DAR ES SALAAM

Postgraduate diploma in Civil Engineering (2007-2008)

The course has enabled me to develop my analytical skills, theory of statically indeterminate structures, project appraisal and planning techniques, geotechnical engineering, highway geometric design, management skills,

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Sign *Emmanuel* Date *24/1/21*
EMANUELI TIMOTHY MLAKU
Advocate Notary Public & Commissioner
for Oaths

- 2/6
- contract document, including condition of contract for various projects
 - the company
 - Monitoring the quality and progress of various activities and advised management of various action to be taken
 - Advise management on completion of projects and handling over process
 - Attend site meeting on the progress and development of all maintenance and infrastructural improvement projects
 - Ensure measurement, proper certification and payment of completed works per contract.

PROJECTS- UNDER NGOGO ENGINEERING LIMITED

- Construction of faecal sludge treatment and exsitory landfill at Ntita Ntomba
- Construction Of Water Supply Piped Scheme(Pump House, Supply and Installation Of Pump Water, Water Tank Water Points distribution Network Chambers And Generator) For Bakuni and Bulaga Villages In Musoma District Council
- Construction of water supply piped scheme (pump house, supply and installation of pump water, water tank water points distribution network chambers and generator) for ngungu village in musoma district council CCL NO. LGAM/2011-2012/W33A
- Improvement Of Water Supply and Sanitation Infrastructure in Nansio Town, CONTRACT NO. MWAWASA /LVKATSAH-II/EAC/W/2013/081Lot2
- Periodic maintenance and routine maintenance on koka Road and avo C road
- Periodic maintenance on Masama municipal market(Shaban road, Mdogobelo Road- 10km
- Construction of drainage system at Nyanbo town council
- Construction of water irrigation scheme at Bopombo Ngara District
- Let 1 periodic maintenance works (km 31+300-km 40+500) along sockets (Kasibuni)-Kibiriri-jilochem regional road (r435)
- Construction of fish landing market at Ponda under ministry of Fisheries and Livestock Zanzibar
- Construction of Mbaruswala bazaar market (Mbaruswala) under ministry of Trade and Industry Tanzania
- Construction of commercial building and petrol station for Mr. Johnson Abetuka located at Njirwenia Njamba. From January 2009- August 2009
- Construction of Mama Clementine secondary school at Makambuko from May 2009- December 2009

2/

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 Sign. *Emmanuel Timothy Mlaki* Date *24/6/21*
EMANUELI TIMOTHY MLAKI
 Advocate Notary Public & Commissioner
 for Oaths

3/1

PROJECT AND PROFESSIONAL EXPERIENCE

PROFESSIONAL EXPERIENCE

Civil Engineering

- Able to understand a client's quality compliance requirement and then make sure they are met.
- Have worked for both public and private sector clients.
- Experience of designing of drainage systems for both rural and urban catchments.
- Excellent communication skills and able to work closely with both clients and other specialists such as architects and building contractors.
- Much experience of drainage works, storm water and sewer-line installation.
- Ability to carry out detailed feasibility studies for projects to ensure the most effective and efficient utilization of materials, equipment and labour.
- Shift and turned design and construction.
- Having the ability to visualise a completed project from technical drawings and other plans.
- Experience of working on major foundations, reinforced concrete and steelwork structures including specialised construction.
- Experience of using the latest computer software for modelling and design purposes.
- Experience of both conceptual and detailed design projects.
- Extensive knowledge and understanding of government building regulations and industry codes of practice.
- Ability to assess the potential impact of a project on the local environment.

Project Management

- Arranging and chairing meetings with clients.
- Ability to liaise with key project stake holders like the clients, water companies, the Environment Agency, local authorities and also utility companies.
- Experience of designing, project managing & liaising with clients.
- Directing outside consultants in construction activities.
- Assisting in the pricing of tender enquiries and valuations.
- Able to ensure that all quality matters relating to project control, design, procurement, implementation and asset handover and commissioning are identified.
- Managing, maintaining and improving the Quality Management System on construction sites.
- Managing and controlling the Continuous Quality Process Improvement Programme.

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Signed... Date: 29/1/24
EMANUELI TIMOTHY MIAKI
Advocate, Notary Public & Commissioner
for Oaths

PROJECT

PROJECT MANAGER - NGOGO ENGINEERING LIMITED

July 2010 - 2019

Responsible for the creation and management of proposals, scopes, budgets, timelines, specifications and cost estimates, consultant

Responsible for ensuring these projects run smoothly and structures are completed within budget and on time. Also in charge of applying procedures and systems to ensure the safety of staff, and others

Activities performed

- Liaised with service authorities like parastatal organisation and government ministries regarding land acquisition, compensations, customer's clearance, permits, water electricity supply for the project.
- Prepared work program and cost control report. kept and maintain record of the project finance and technical documentations.
- Checked and certified all finishes works, checked and approved equipment and material importation for construction works
- Maintained adequate procurement documentation and information to insure proper and efficient use of funds.
- Supervised and construction of access roads, sewerage drainage system and fresh water distribution system

SITE ENGINEER - DISTRICT ENGINEER MAMAMPAKO

January 2009- December 2010

Responsible for the creation and management of proposals, scopes, budgets, timelines, specifications and cost estimates, consultant

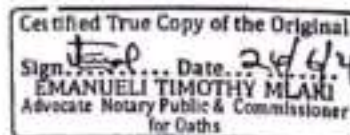
Activities performed

- Assisted by contract movement, inspection of and approval of completed work assignment
- Provided advice on works designs of building and other infrastructure including assistance on procurement activities related to works and consulting service
- Assisted the development of technical specification, bill of quantities and service terms of reference of various works, subcontracts.

SITE AGENT-MSUKWA GENERAL ENTERPRISE LIMITED

2019-TO DATE

Responsible for creating and managing all procurement and construction activities related to this business system



DARES SALAAM INSTITUTE OF TECHNOLOGY

ADVANCE Diploma in Civil Engineering (2003 - 2005) (ADE)

The course has enabled me to develop my analytical skills, management skills, knowledge of design relevant structures such as bridges and tall building, knowledge of implementing structure design at site, knowledge of preparing tender document and knowledge of evaluating tender.

ADVANCED LEVEL

Dares Salaam Institute of Technology (1998-2001)- FTC

Full technician in Civil Engineering

The course provided the skill in technical level in civil engineering and I obtain the following knowledge: site design, soil mechanics and foundation, building technology and construction, computer aided programme.

ORDINARY LEVEL

Kabanga secondary School 1994-1997

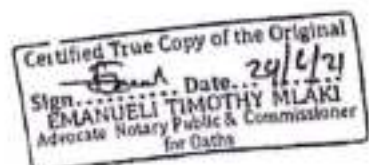
Certificate of Secondary Education Examination

KEY COMPETENCIES AND SKILLS

- Tendering process
- AutoCAD
- Structural design
- Quality assurance
- Project management
- Certification
- Strategic planning
- Site supervision
- Inspection
- Feasibility study
- Highway design
- Tendering process

Personal skill

- Ability to understand and present others' point of view
- Skilled at analyzing and interpreting information
- Good communication skills when dealing with clients, developers, consultants, elected representatives and the public
- Having clarity and sound judgment
- Proven motivational and leadership skills
- A team player with an enthusiastic attitude
- Having a natural drive with a loyal, strong, and proactive work ethic.



4/6

PERSONAL

Interests: I watch and participate in sports like football, basketball. I like listening to music and watching movies.

I also enjoy reading technology magazines and frequently go swimming.

References

1. Eng. Solomon Ngyiro
0752 2 88 301
Nigapo Engineering Limited
2. Eng. Maurice Agai
Sioungiro District Council
0784978492/0754978492
PA1.BCIN 77228
Sioungiro
3. Benne Godwin
0948 377 060
Aratha

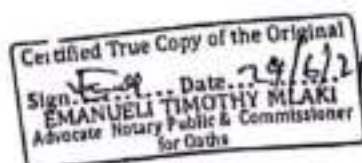
Certification

I, the undersigned hereby certify that to the best of my knowledge and belief, this profile accurately describes qualifications, experience and myself.

Yvonne Egundu

Date: May 27, 2019

21



6/4
Construction of maternity ward at Njembe district hospital, Makambako health centre
and Njembe town health centre

Construction of laboratories, classroom, hostel and staff quarters for various secondary
schools like Njembe secondary school, Mpechi secondary school
Routine, spot, periodic maintenance of district roads
Design and construction of different bridge and drainage system

June, 2001 - December 2001: Working as Highway Technician- Nyanza road
works

Project:

- Rehabilitation of Nyakawizi-Kipasa Road 35km

Responsibility

- Quality assurance
- Material testing
- Drainage works

January 1999- September 2000 working as Technician Group five Roads works- Geita
Mining

Project:

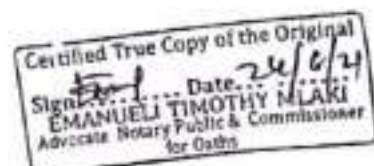
- Rehabilitation of roads and construction of dam

Responsibility

- Quality assurance
- Material testing
- Drainage works

Membership of Engineering Professional Institution/Association:

1. Institution of Engineers Tanzania.
2. Engineers Registration Board. - Professional Engineer PE3475



- 16/8
- Vertical extension of maternity ward for Kiserendani Municipal at Mwanjambale municipal Hospital. Project completed on June 2008
 - Renovation of assembly hall for Hala Municipal council at Mmasi Mmija grounds
 - Construction of dining hall and hostel for Njombe midwifery and nursing college at Njombe
 - Construction of commercial building for Mr. Deo sanga at Njombe

PROJECTS- UNDER NJOMBE DISTRICT COUNCIL

Preparation of drawings, Design bill of quantities and supervise of Construction of various staff house for the following area Makamlaka, Lujembe, Njombe, Mhanga, and Kilima.

Design and renovation public buildings like hospitals, schools and offices

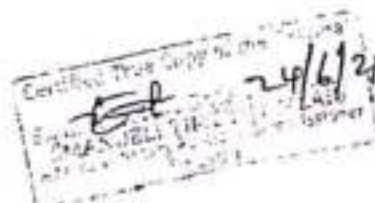
CIVIL ENGINEER - ASSISTANCE DISTRICT ENGINEER NJOMBE COUNCIL

June 2005 - January 2009

Responsible for the creation and management of proposals, reports, budgets, timelines, specifications and cost estimates.

- Involved in a project that included the construction, maintenance and repair work on motorways.
- Designing and supervising of motorway maintenance works.
- Involved in highways drainage systems, motorway widening, and inspection of bridge structures.
- Responsible for the design and development of bridge maintenance schemes.
- Maintaining non-conformance / non-compliance records and logs.
- The constant monitoring of the project work and also ongoing cost control.
- Prior planning and the identification of critical materials essential for the project construction.
- Responsible for quality control of engineering and construction documents.
- Negotiation of contract.
- Preparation of tender document, contract preparation.
- Structural design of various structures like building, and bridges.
- Design and supervision of project.
- Quality control.
- Project appraisal.
- Tendering process.

Project



The National Examinations Council of Tanzania



National Craft Examinations
Award Certificate in Engineering

This is to certify that **EMANUEL S.C. WONG**

Index No **4003/0100**

of **DAK RA NAKAYO TECHNICAL COLLEGE**

for the above examination which held in **SEPTEMBER 1994**

and was awarded this certificate

after obtaining the following performance:

Subject	Grade
MATHEMATICS	A
ENGINEERING SCIENCE	A
ENGINEERING DRAWING	A
APPLIED PHYSICS & MECHANICS	A

Executive Secretary

Index No **007031**

True Copy of the Original
Certified by the
Advocate
for Oaths

Certified True Copy of the Original
Sign *Ed* Date **24/6/21**
EMANUELI TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

The National Examinations Council of Tanzania



National Technical Examinations
Civil Technician Certificate

IN CIVIL ENGINEERING

This certificate was awarded to A.C. NDIKUMU

of the Department of

of TECHNICAL COLLEGE

and he has passed the examination which he held in the year 1981

and was awarded the certificate

after meeting the following requirements:

Subjects	Grade
MATHEMATICS	1 (PASS)
ENGINEERING & TECHNOLOGY	2 (PASS)
STRUCTURAL DESIGN & DRAWING	2 (PASS)
INTERFACED ENGINE & CONSTRUCTION	2 (PASS)
ENGINEERING & CONSTRUCTION	2 (PASS)
QUALITY CONTROL & INSPECTION	2 (PASS)



Chairman

The seal of the National Examinations Council of Tanzania is hereby placed on this certificate as evidence of its authenticity.

Executive Secretary

171 No 032619

Original was one of the Original
No. 70-29-1-2089

Certified True Copy of the Original
Sign. *Timothy Mlaki* Date. *20/6/21*
EMANUELI TIMOTHY MLAKI
Advocate Notary Public & Commissioner
for Oaths

PLANTS & EQUIPMENTS

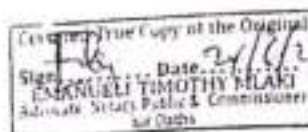
PLANTS & EQUIPMENTS

Equipment and Plants

Major items of Contractor's Equipment proposed for carrying out the works
List all information requested below

List all information requested below

S/N.	Item of equipment	Description, make, and age (years)	Condition (new, good, fair) and number available	Owned, leased (from whom?) or to be purchased (from whom?)
1.	Excavator	Caterpillar m/c	Good 1pc	Owned
2.	Roller Vibrator 10 tonnes		Good	Leased
3.	Transit Mixer	TAW 600	Good	Owned
4.	Concrete mixer 300 350 litres		Running 3pcs	Owned
5.	Poker vibrator 58 72mm diameter		Good 3pcs	Owned
6.	Tipper lorry 14 to 20 tons	Scania 6000	Running 4pcs	Owned
7.	Dumpers		Good 3pcs	Owned
8.	Self-loading steel	Steel iron 1000	Good 1000	Owned
9.	Temporary steel staircase			Owned
10.	Dumpy level		Good 3pcs	Owned
11.	Plate Compactor	100 1000	Good 4pcs	Owned
12.	File cutter	100 100	Good 5pcs	Owned
13.	Electricity set 70 kVA	100 100	Good 2pcs	Owned
14.	Steel cutter	100 100	Good 3pcs	Owned
15.	Carpenter equipment	100 100	Good 100	Owned
16.	Circular saw	100 100	Good 4pcs	Owned
17.	Welding machine	100 100	Good 3pcs	Owned



A2

10903150-4

10903150-4

MOTOR VEHICLE REGISTRATION CARD

NO. 7898753

First Registered: 17/10/2018

Vehicle Control Number: 2486396

Registration Number: T765DKT

Owner Details:

ID Number: 109702935
 Category: Company
 Name: AZHAR CONSTRUCTION CO. LIMITED
 Postal Address: 35918
 DAR ES SALAAM

Vehicle Details:

Make: Caterpillar
 Model: 320CL
 Model Number: 320CL
 Body Type: Excavator
 Colour: Yellow
 Class: Construction Equipment

Title Holder Details:

ID Number: 109702935
 Category: Company
 Name: AZHAR CONSTRUCTION CO. LIMITED
 Postal Address: 35918
 DAR ES SALAAM

Year of Manufacture: 2005
 Chassis No: CAT0320CCGLA00326
 Engine No: CAT0320CCGLA00326
 Engine Capacity: 10500
 Fuel Used: Diesel
 Number of Axes: 2
 Axle Distance: 1
 Seating Capacity: 19000
 Tare Weight: 19005
 Gross Weight: 19005
 Imported From: United Kingdom

Number of Previous Owner(s): 0

Vehicle Usage: Private or Normal

Previous Registration Number:

Dec. Year: 18

Office: TZOL

Agent Tin: 109702935

Dec Ref. No: 1348951

Item: 1

NOTIFICATION OF CHANGE OF OWNERSHIP OR TITLE HOLDER

(Tick here: fill in owner particulars and sign declaration below
 NB Current owner must declare his/her stamp duty status)

NOTIFICATION OF TRANSFER OF TITLE TO CURRENT OWNER

(Tick here and sign declaration below)

New Owner Category

- Children of Tanzania
 Parastatal
 Company
 Expatriate
 Other Agencies/Associations/Clubs
 Partnership
 Sole Proprietor
- ☐ Financial Institution
☐ Local Government
☐ Other Government Organisation
☐ Diplomat/Foreign Mission
☐ International Organisation
☐ Cooperative Society
☐ Religious Organisation

Current Owner's Stamp Duty Status

VAT or Stamp Duty Composition Number:

Stamp Duty Receipt Number:

☐ Not Applicable

TIN No or other No:

Reason for Change of Ownership: ☐ Sold ☐ Repossessed ☐ Deceased Estate ☐ Within company or family ☐ Other

USE BLOCK LETTERS:

New Owner's Name:

Age:

New Owner's Postal Address:

Town/Village:

REASON FOR CHANGE OF PARTICULARS & USE: ☐ Roadworthiness ☐ Stolen ☐ Scrapped ☐ Repossessed ☐ Reconstructed

New: Body Type: ☐ Engine No: ☐ Engine Capacity: ☐
 Propelled by: ☐ Fuel Type: ☐ Tare Weight: ☐
 Gross Weight: ☐ Colour: ☐ Seating Capacity: ☐

New use: ☐ Private ☐ Tax
☐ Commercial ☐ Emergency
☐ Donor Funded

Please Enclose Police Inspection Report

DECLARATION

I, the Title Holder, sign and declare that the Title has been transferred to the Owner
 or to a new Title Holder

I, the owner, sign and declare that the changes reported by me are true and correct

We, the owner and the new owner, sign and declare that the vehicle was disposed to the new owner on the

day of

20

at the Sales Price Tsh

Owner

New Owner

RECEIPT
TANZANIA REVENUE AUTHORITY

Reason: New Registration

Received From: AZHAR CONSTRUCTION CO. LIMITED

Particulars	Amount
Registration Tax	TZS 250,000
Annual Licence Fee 2500cc-above	TZS 300,000
Total Amount	TZS 550,000

Registration No: T765DKT

Mode of Payment: Any Bank

Receipt No:

63615

Issuing Office:

Station:

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

Signature of the Original

10903150-4

AZHAR CONSTRUCTION COMPANY LIMITED
 P.O. Box 35918
 Tel: 0787 021 444

AZHAR CONSTRUCTION COMPANY LIMITED
 P.O. Box 35918
 Tel: 0787 021 444

11442770-4

11442770-4



MOTOR VEHICLE REGISTRATION CARD

NO 7151540

Registration Number: T458DAE

First Registered: 14.07.2018

Vehicle Control Number: 2044059

Owner Details:

ID Number: 109702935
 Category: Company
 Name: AZHAR CONSTRUCTION CO. LIMITED
 Postal Address: 35918
 DAR ES SALAAM

Vehicle Details:

Make: FAW
 Model: MIXER
 Model Number: CA 3320
 Body Type: Truck
 Colour: Yellow
 Class: Heavy Load Vehicle (GVM > 5500kg)

Title Holder Details:

ID Number: 109702935
 Category: Company
 Name: AZHAR CONSTRUCTION CO. LIMITED
 Postal Address: 35918
 DAR ES SALAAM

Year of Manufacture: 2016
 Chassis No: AAK2826F DGB071853
 Engine No: W0615501515K2C8000
 Engine Capacity: 9725
 Fuel Used: Diesel
 Number of Axles: 3
 Axle Distance: 3
 Seating Capacity: 13000
 Tare Weight: 14000
 Gross Weight: 14000
 Imported From: South Africa/New Ven

Number of Previous Owner(s): 0

Vehicle Usage: Commercial

Previous Registration Number:

Dec. Year: 16

Office: T2DL

Agent Tin: 105565514

Dec Ref. No: 1186732

Item: 1

NOTIFICATION OF CHANGE OF OWNERSHIP OR TITLE HOLDER

(Tick here, fill in owner particulars and sign declaration below
 NB Current owner must declare higher stamp duty status)

NOTIFICATION OF TRANSFER OF TITLE TO CURRENT OWNER

(Tick here and sign declaration below)

New Owner Category

- ☐ Origin of Tanzania
☐ Financial Institution
☐ Local Government
☐ Other Government Organisation
☐ Diplomat/Foreign Mission
☐ International Organisation
☐ Cooperative Society
☐ Religious Organisation
☐ Partnership
☐ Sole Proprietor

Current Owner's Stamp Duty Status

VAT or Stamp Duty Composition Number:

Stamp Duty Receipt Number:

Not Applicable

TIN No or other No:

Reason for Change of Ownership: Sold Repossessed Deceased Estate Within company or family Other

USE BLOCK LETTERS

New Owner's Name:

Town/Place:

New Owner's Postal Address:

Reason for Change of PARTICULARS & USE: Roadworthiness Stolen Scrapped Repossessed Reconstructed

New: Body Type Engine No Engine Capacity
 Fuel Type Tare Weight
 Propelled by Colour Seating Capacity
 Gross Weight

New use: Private Tax
 Commercial Emergency
 Donor Funded

Please Enclose Police Inspection Report

DECLARATION

I, the Title Holder, sign and declare that the Title has been transferred to the Owner
 or to a new Title Holder

I, the owner, sign and declare that the changes reported by me are true and correct

We, the owner and the new owner, sign and declare that the vehicle was disposed to the new owner on the

at the Sales Price of

RECEIPT
TANZANIA REVENUE AUTHORITY

Reason: Amend Title Holder

Received From: AZHAR CONSTRUCTION CO. LIMITED
 Particulars: T2S 10,000
 Registration Card Fee: T2S 10,000
 Total Amount:

Registration No: T458DAE

Mode of Payment: Mobile

15757900

Receipt No: 5374295

Issuing Office: 10002554

Issuing Office: 10002554

Certified True Copy of the Original

Signature: 11/07/2018

EMANUELE TIMOTHY MBARI

Advocate, Notary Public & Commissioner

for Office: 11442770



09780894-6

09780894-6

MOTOR VEHICLE REGISTRATION CARD

NO: 6386429

First Registered: 20/07/2010

Vehicle Control Number: 722514

Registration Number: T913BDB

Owner Details:

ID Number: 108677732
 Category: Company
 Name: AZHAR CONSTRUCTION CO. LIMITED
 Postal Address: 35918
 DAR ES SALAAM

Vehicle Details:

Make: Toyota
 Model: Landcruiser
 Model Number: JTELB
 Body Type: Pick-up
 Colour: White
 Class: Light Load Vehicle (GVM 3500kg or Less)
 Year of Manufacture: 2006
 Chassis No: JTELB71J8G7055012
 Engine No: 1H20609062
 Engine Capacity: 4163
 Fuel Used: Diesel
 Number of Axes: 2
 Axle Distance: 0
 Seating Capacity: 3
 Tare Weight: 1000
 Gross Weight: 1000
 Imported From: Dubai

Title Holder Details:

ID Number: 108677732
 Category: Company
 Name: AZHAR CONSTRUCTION CO. LIMITED
 Postal Address: 35918
 DAR ES SALAAM

Number of Previous Owner(s): 0

Vehicle Usage: Private or Normal

Previous Registration Number:

Dec. Year: Office: Agent Tin: Dec Ref. No: Item

NOTIFICATION OF CHANGE OF OWNERSHIP OR TITLE HOLDER

(Tick here, fill in owner particulars and sign declaration below
 NB Current owner must declare higher stamp duty status)

NOTIFICATION OF TRANSFER OF TITLE TO CURRENT OWNER

(Tick here and sign declaration below)

New Owner Category

- Citizen of Tanzania
 Parastatal
 Company
 Expatiate
 Other Agencies/Associations/Clubs
 Partnership
 Sole Proprietor
- Financial Institution
 Local Government
 Other Government Organisation
 Diplomat/Foreign Mission
 International Organisation
 Cooperative Society
 Religious Organisation

TIN No or other No:

Current Owner's Stamp Duty Status

VAT or Stamp Duty Composition Number:

Stamp Duty Receipt Number:

Not Applicable

Reason for Change of Ownership: Sold Repossessed Deceased Estate Within company or family Other

USE BLOCK LETTERS.

New Owner's Name:

Age:

New Owner's Postal Address:

Town/Place:

REASON FOR CHANGE OF PARTICULARS & USE: Roadworthiness Stolen Scrapped Repossessed Reconstructed

New: Body Type Engine No Engine Capacity
 Propelled by Fuel Type Tare Weight
 Gross Weight Colour Seating Capacity

New use: Private Tax
 Commercial Emergency
 Donor Fund

Please Enclose Police Inspection Report

DECLARATION

I, the Title Holder, sign and declare that the Title has been transferred to the Owner
 or to a new Title Holder

I, the owner, sign and declare that the changes reported by me are true and correct

We, the owner and the new owner, sign and declare that the vehicle was disposed to the new owner on the

of the Sales Price Tsh

RECEIPT
TANZANIA REVENUE AUTHORITY

Reason: Change vehicle particulars

Received From: AZHAR CONSTRUCTION CO. LIMITED
 Particulars: T25 10,000
 Registration Card Fee: T25 10,000
 Total Amount:

Registration No: T6108KD

Agent Mobile: 15207504

5054610

Date: 24/11/18



09412926-6

09412926-6

First Registered 04/05/2007

MOTOR VEHICLE REGISTRATION CARD

NO: 6828231

Owner Details:

Vehicle Control Number: 333240

Registration Number: T831ARG

ID Number

108677732

Category

Company

Name

AZHAR CONSTRUCTION CO LIMITED

Postal Address

35918
DAR ES SALAAM

Title Holder Details:

ID Number

108677732

Category

Company

Name

AZHAR CONSTRUCTION CO LIMITED

Postal Address

35918
DAR ES SALAAM

Vehicle Details:

Make

Scania

Model

113

Model Number

113 320M

Body Type

Tipper

Colour

White/Blue

Class

Heavy Load Vehicle(GVM > 3500Kg)

Year of Manufacture

1995

Chassis No

0434191

Engine No

4102518

Engine Capacity

11000

Fuel Used

Diesel

Number of Axles

3

Axle Distance

0

Seating Capacity

3

Tare Weight

8500

Gross Weight

10000

Imported From

Great Britain(And Northern Ireland)

Number of Previous Owner(s): 2

Vehicle Usage:

Private or Normal

Previous Registration Number

Dec. Year:	Office:	Agent Tin:	Dec Ref. No:	Item:
<input type="checkbox"/> NOTIFICATION OF CHANGE OF OWNERSHIP OR TITLE HOLDER (Tick here, fill in owner particulars and sign declaration below NB Current owner must declare his/her stamp duty status)			<input type="checkbox"/> NOTIFICATION OF TRANSFER OF TITLE TO CURRENT OWNER (Tick here and sign declaration below)	
New Owner Category <input type="checkbox"/> Citizen of Tanzania <input type="checkbox"/> Parastatal <input type="checkbox"/> Company <input type="checkbox"/> Expatriate <input type="checkbox"/> Other Agencies/Associations/Clubs <input type="checkbox"/> Partnership <input type="checkbox"/> Sole Proprietor <input type="checkbox"/> TIN No or other No			Current Owner's Stamp Duty Status <input type="checkbox"/> Financial Institution <input type="checkbox"/> Local Government <input type="checkbox"/> Other Government Organisation <input type="checkbox"/> Diplomat/Foreign Mission <input type="checkbox"/> International Organisation <input type="checkbox"/> Cooperative Society <input type="checkbox"/> Religious Organisation VAT or Stamp Duty Composition Number: Stamp Duty Receipt Number: Not Applicable	

Reason for Change of Ownership: ☐ Sold ☐ Repossessed ☐ Deceased Estate ☐ Within company or family ☐ Other

USE BLOCK LETTERS

New Owner's Name

New Owner's Postal Address

Town/Place

Age

REASON FOR CHANGE OF PARTICULARS & USE: ☐ Roadworthiness ☐ Stolen ☐ Scrapped ☐ Repossessed ☐ Reconstructed

New: ☐ Body Type ☐ Engine No ☐ Engine Capacity
☐ Propelled by ☐ Fuel Type ☐ Tare Weight
☐ Gross Weight ☐ Colour ☐ Seating Capacity

New use: ☐ Private ☐ Taxi
☐ Commercial ☐ Emergency
☐ Donor Fund

Please Enclose Police Inspection Report

DECLARATION

I, the Title Holder, sign and declare that the Title has been transferred to the Owner or to a new Title Holder

I, the owner, sign and declare that the changes reported by me are true and correct

We, the owner and the new owner, sign and declare that the vehicle was disposed to the new owner at the day of the Sales Price Tax.

Owner

New Owner

Certified True Copy of the Original
 Date: 13/11/15
 Sign: TIMOTHY MILANI
 for Public & Commissioner
 for Ombuds

day of

20

RECEIPT
TANZANIA REVENUE AUTHORITY

Received From: AZHAR CONSTRUCTION CO LIMITED

Reason: Change vehicle particulars

Particulars:	Amount:
Registration Card Fee	TZS 10,000
Total Amount	TZS 10,000

Registration No: T433ARG

Contact Mobile

3337290

100158

Date: 13/11/15



04003285-x

TANZANIA REVENUE AUTHORITY

04003285-x MVSD

MOTOR VEHICLE REGISTRATION CARD

NO: 2651052

First Registration: 2007/10

Vehicle Control Number: 730523

Registration Number: T611BKB

Owner Details:

ID Number:

Category:

Name:

Postal Address:

10071056

Self Proprietor

ALHAR CONSTRUCTION CO LIMITED

PO BOX 30818

DARES SALAM

Title Holder Details:

ID Number:

Category:

Name:

Postal Address:

10181054

Self Proprietor

ALHAR CONSTRUCTION CO LIMITED

PO BOX 30818

DARES SALAM

Number of Previous Owners: 1

Vehicle Usage:

Private or Normal

Previous Registration Number:

Vehicle Details:

Make:

Model:

Model Number:

Body Type:

Color:

Class:

Type:

Land Cruiser

JTEC

Pick up

White

Light passenger vehicle

(Less than 17 seats)

Year of Manufacture:

Chassis No:

Engine No:

Engine Capacity:

Fuel used:

Number of Axles:

Axle Distance:

Seating Capacity:

Tare Weight:

Gross Weight:

Impound Item:

2006

JTEC1011010003

10000000

4100

Diesel

2

3

1000

1000

0.00

NOTIFICATION OF CHANGE OF OWNERSHIP OR TITLE HOLDER

(Tick boxes, fill or insert particulars and sign Declaration below)

NB: Current owner must declare factor Stamp Duty Status

New Owner Category:

Individual:

Company:

Exempt:

Other Agencies/Associations/Clubs

Partnership

Self Proprietor

To Not in other No

Financial Institution

Local Government

Other government Organisation

Diplomatic Foreign Mission

International Organisation

Co-operative Society

Religious Organisation

NOTIFICATION OF TRANSFER OF TITLE TO CURRENT OWNER

(Tick boxes and sign Declaration below)

Current Owner's Stamp Duty Status

NAT or Stamp Duty Exemption Number

Stamp Duty Receipt Number

Not Applicable

Reason for Change of Ownership:

Sole

Repossessed

Seized estate

Within company or family

Other

USE BLOCK LETTERS

New Owner's Name:

Age:

New Owner's Postal Address:

Town/Village:

REASON FOR CHANGE OF PARTICULARS & USE

New

Body Type

Propelled by

Gross Weight

Engine No

Fuel Type

Colour

Engine Capacity

Tare Weight

Seating Capacity

New use

Private

Commercial

Other Purpose

Please enclose Police Inspection Report

DECLARATION

I, the Seller, sign and declare that the Title has been transferred to the buyer

or to a new Title Holder

I, the buyer, sign and declare that the changes reported to me are true and correct

We, the owner and the new owner, sign and declare that the vehicle was disposed to the new owner on the

day of

20

at the Sales Price of

Dares

New Owner

RECEIPT

TANZANIA REVENUE AUTHORITY

Received from ALHAR CONSTRUCTION CO LIMITED

Registration Fee

Stamp Duty

Registration Fee

Registration No: T611BKB

Kind of Payment Bank Draft

143000

Receipt No: 271079

Issuing Officer: M. MUMUNDU

Issuing Office: KINSHASA

For: CHANGE OWNER

Date: 27/07/11

04003285-x

04003285-x

Certified True Copy of the Original

Signed: EMANUELI TIMOTHY MILAKI
Associate: Ministry Public & Commissioner
for Oaths

07662805-1

07662805-1

Owner Details:		Vehicle Details:	
ID Number	108577732	Registration Number	T211AMA
Category	Company	Vehicle Details:	
Name	AZHAR CONSTRUCTION CO. LIMITED	Make	Toyota
Postal Address	35918 DAR ES SALAAM	Model	Landcruiser
		Model Number	JTIP08J45
		Body Type	Push-up
		Colour	White
		Class	Light Load Vehicle (GVW 3500kg or less)
		Year of Manufacture	1985
		Class No	JTIP08J7505501134
		Engine No	1B00759555
		Engine Capacity	3955
		Fuel Used	Diesel
		Number of Axles	2
		Axle Distance	
		Seating Capacity	5
		Tare Weight	2580
		Gross Weight	3500
		Imported From	N/A

Vehicle Control Number: 256764

Registration Number: T211AMA

Vehicle Details:

Make: Toyota

Model: Landcruiser

Model Number: JTIP08J45

Body Type: Push-up

Colour: White

Class: Light Load Vehicle (GVW 3500kg or less)

Year of Manufacture: 1985

Class No: JTIP08J7505501134

Engine No: 1B00759555

Engine Capacity: 3955

Fuel Used: Diesel

Number of Axles: 2

Axle Distance:

Seating Capacity: 5

Tare Weight: 2580

Gross Weight: 3500

Imported From: N/A

Number of Previous Owner(s): 1

Vehicle Usage: Private or Normal

Previous Registration Number:

Dec. Year: Office Agent Title Dec Ref. No. Item

☒ NOTIFICATION OF CHANGE OF OWNERSHIP OR TITLE HOLDER

☐ NOTIFICATION OF TRANSFER OF TITLE TO CURRENT OWNER

(Tick here and sign declaration below)

(Tick here and sign declaration below)

NR Company cannot be up declared as the owner (Auto Station)

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