



# CONSTRUCTION OF MPAKA ICD OFFICES

**REQUEST FOR TENDER NO.08/2023**

08/12/2022  
Eswatini Railways



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## **ABBREVIATIONS / ACRONYMS**

ESR – Eswatini Railways  
PO – Purchase Order  
GST – General Sales Tax  
VAT – Value Added Tax



## 1. COMPANY BACKGROUND

### 1.1. Introduction

Eswatini Railways is a parastatal organization that provides transport services for import and export commodities as well as transit cargo. It is rated one of the best railways in the SADC region in terms of transit time, reliability, and predictability. It links Swaziland's main industrial centres with the railway systems of South Africa, Mozambique, and other SADC countries that trade with overseas markets. This railway owns and maintains the infrastructure, rolling stock and operates a 301km rail network.

ESR seeks to engage competent and suitable service provider to Construct Site Operational Offices at the newly established Mpaka Inland Container Depot (ICD).

### 1.2. ESR Values are:



The value of accountability drives ESR to honestly adhere to a procurement process that is in line with international best practice, aimed at maintaining a fair and transparent tendering process. The tender document therefore includes all the necessary forms and conditions of contract and will therefore become the terms and conditions of contract once an award has been made.

### 1.3. Purpose

The operations at the Mpaka ICD require personnel to be housed in a safe and secure building to ensure smooth delivery of the ESR organisational goals and realize profit. Therefore, purpose of this tender is to procure a suitably qualified civil contractor to erect the office building. The contractor must be registered with the construction Industry council (CIC) Category B3 only, as required by law.

### 1.4. SCOPE:

The Contractor shall:

Perform all civil works, earthworks, roofing, glazing, wiring, plumbing, and painting works required to complete the office building, including construction of all ancillary structures as directed by the Engineer.

### 1.5. Evaluation Criteria - Competencies and Expertise Required and Weight Allocation

DESCRIPTION	POINTS
<b>A. Responsiveness of Tender (Yes / No)</b>	
Required documentation to be submitted. <ul style="list-style-type: none"><li>i. Company Profile, Form J or equivalent for foreign registered companies,</li><li>ii. Copy of Certificate of Incorporation.</li><li>iii. Original/Valid Tax Compliance Certificate.</li><li>iv. Certified copy of VAT Registration Certificate.</li><li>v. Certified copy of valid certificate of registration with CIC, category B3 only.</li><li>vi. Declaration of Eligibility; Technical Bid Form; and Financial Proposal Submission Forms.</li><li>vii. Police Clearance or Affidavit of Non-Conviction for Company Directors.</li><li>viii. Audited Financial Statements not older than 12 months on the date of submission of this Tender.</li><li>ix. General receipt for purchase of tender document or proof of purchase of tender document.</li><li>x. A E10,000.00 Tender Bond.</li><li>xi. Financial Proposal in A Separate and Sealed Envelope Marked "Financial Proposal"</li><li>xii. Technical Proposal – To include detailed Item Specifications.</li><li>xiii. Banking Details</li><li>xiv. A Power of Attorney (Letter confirming name(s) of person(s) authorized to sign on behalf of the company).</li><li>xv. Valid ENPF Compliance Certificate.</li></ul>	Yes/No

xvi. Valid Labour Compliance Certificate.	
<b>B. Technical Capability and Availability of Resources</b>	
<b>(i) General Construction Experience of Contractor:</b> <ul style="list-style-type: none"> <li>The Contractor must have successfully completed at least two (2) construction projects in the last ten (10) years from date of submission, each with a value of at least E5,500,000.00 (Five Million, Five hundred Thousand Emalangeneni Only). The Bidder must submit copies of completion/final acceptance letters signed by the Employer's Representative.</li> </ul>	10
<b>(ii) Specific Construction Experience:</b> <ul style="list-style-type: none"> <li>The contractor must have participated in at least one (1) project of the same nature and complexity (buildings only) implemented during the last Ten (10) years, with a value of at least E2,000,000.00 (Two Million Emalangeneni Only). Similarity shall be determined based on the physical size, complexity, construction methodology or technology as described in the title of the contract.</li> <li>Proof of relevant experience by providing three reference letters with contact persons and contact numbers.</li> </ul> <p><b>NB:</b> ESR reserves the right to contact any of the references listed.</p>	25
<b>(iii) Contractor's Personnel:</b> <p>The Bidder must demonstrate that it has qualified personnel with the recent experience for the key positions that meet the following criteria, and that the nominated personnel confirm their availability to the contract for its full duration.</p> <p>Key Personnel and Points allocation:</p> <ol style="list-style-type: none"> <li>Contract Manager (5 points)</li> <li>Site Agent (5 points)</li> <li>Safety, Health, and Environment Officer (5 points)</li> </ol> <p>CV's and Academic Certificates are be attached as proof of qualification. The personnel mentioned in 1 and 2 above must have a minimum Diploma in Civil Engineering or related field. No 3 must have a minimum of a Diploma in Environmental Science/Health or related field.</p>	15

<p><b>(iv) Contractor's Equipment:</b></p> <p>The Bidder must demonstrate that it owns or has the ability to hire the following key equipment and confirm its availability for the entire duration of the contract.</p> <ol style="list-style-type: none"> <li>1. Light Delivery Vehicle (5 points)</li> <li>2. Concrete Mixer (5 points)</li> </ol> <p>The above listed Plant and Equipment must be supported by proof of ownership documents or lease agreement (proof of ownership /lease must be attached).</p>	10
<p><b>(v) Works Programme:</b></p> <p>A work plan (works programme) with brief descriptions of the main tasks, showing the sequence and proposed timetable for implementing the tasks. The Bidder must submit a comprehensive method statement, with drawings if necessary, showing the methods by which, it proposes to carry out the works. In particular, the Bidder must indicate the critical milestone bar chart showing all activities falling within the critical path. The work plan must indicate a maximum duration of five (5) consecutive calendar months.</p> <ul style="list-style-type: none"> <li>• Programme of works indication a duration of not more that 5 months (3 points)</li> <li>• A critical milestone bar chart detailing activities on critical path (3 points)</li> <li>• Method statement (4 points)</li> </ul>	10
<p><b>NB: A proposal with a score less than 70% (minimum technical qualifying mark) of the total points allocated above shall be disqualified and eliminated from further evaluation.</b></p>	

## 1.6. Financial Criteria in Emalangen

- The pricing must be comprehensive and clearly showing all taxes to be charged, total price, the on-going costs including any basis of escalations, penalties and/ or discounts should be identified and considered, other related charges, and payment terms.
- The following evaluation formulae shall be used in the allocation of scores:

$$Ps = \frac{\text{Lowest price}}{\text{Bid price.}} \times \text{Total Points}$$

Where:

$$Ps - \text{Points scored for bid under consideration.}$$

### 1.7. Final Evaluation

The weighted scores (technical and financial) shall be added together to give a total score for each proposal and the supplier with the highest score shall be recommended for award.

The weights to be used for the technical evaluations are as follows

- a. Technical – 70%
- b. Financial – 30%

### 1.8. Collection and Submission of Tender Documents

The Tender documents are obtainable at a non-refundable fee of E1 500.00 at Eswatini Railways Head Office, Accounts Section from **14<sup>th</sup> of December 2022** to **10<sup>th</sup> of January 2023** between 09:00am and 15:30hours. Documents are also downloadable at ESPPRA website, [www.sppra.co.sz](http://www.sppra.co.sz) or ESR website at [www.eswatinirail.co.sz](http://www.eswatinirail.co.sz)

Payment should be made at the bank:

**Banker: Eswatini Railways**

**Bank: Nedbank**

**Account Number: 20000002594**

**Branch Code: 360164**

Submission of Bids shall close punctually at **10h30** on **10<sup>th</sup> of January 2023** in the tender box located at the main entrance of the Eswatini Railways Head Office in Mbabane at Reception. The documents should be submitted in a plain sealed envelope clearly marked “**Tender No.08/2023- Construction of Mpaka ICD Offices**” and must not bear any name or mark which would identify the Tenderer.





## **2. INSTRUCTIONS TO TENDERERS AND NOTES FOR PARTICULAR ATTENTION**

### **2.1. General**

The tenderers attention is drawn to the following notes, which **IF NOT COMPLIED WITH MAY CAUSE THE TENDER TO BE REJECTED**.

### **2.2. Compliance with Instructions**

The tender shall be submitted in accordance with the following Instructions as detailed below.

### **2.3. Completion of tender Documents**

The tender documents shall be completed as issued to the tenderer. The tender shall be signed and witnessed, and all information required filled in by the Tenderer.

### **2.4. Summary Prices/ Price list**

The tenderers must insert their price list or summary sheet including all delivered prices of all products specific to Railway. The prices must include all costs. Tender documents should include separate financial proposal in a sealed envelope separate from the technical proposal.

### **2.5. Authority of tender**

The tender must be signed by a duly authorized representative and the evidence to that effect should be provided in a form of Board Resolution.

### **2.6. Alterations and Modifications**

Tenders shall be completed and submitted as printed. No alterations or medications shall be made to the tender documents. Tenderers shall use the original tender documents, failure to comply, will disqualify the tenderer. Tenderers shall comply entirely with the terms of the tender documents.

### **2.7. Errors**

There shall be no erasing/tip-pexing or over writing. Any mistake made shall be neatly cancelled and initialled by the tenderer.

### **2.8. Tender Bond**

To secure due performance by the Tenderer of the obligations undertaken by them, Tenders must be accompanied by a Tender Bond in the sum of the amount as stated on the Form of Tender Bond bound into the back of this document. The whole of the Tender Bond shall be forfeited should the Tenderer withdraw the whole or any part of his tender during the Tender validity period. An institution registered or licensed to do business in the Kingdom of Eswatini shall furnish the security. No tender will be considered unless it is accompanied by an approved Tender Bond.



## 2.9. Qualified Tenders

- a) A tender will be considered fully responsive if it contains no conditions and / or qualifications.
- b) Tenderers who choose to include conditions and / or qualifications must also include an assessment of the implications such conditions and/or qualifications may or will have in terms of quality of service/product(s), time constraints and cost. A failure to comply with this requirement shall result in the tender being rejected.
- c) Tenderers shall be notified in writing of any condition and / or qualification that is unacceptable to the ESR. The Tenderer shall be afforded an opportunity to withdraw such condition and / or qualification if it has no material bearing on the terms and conditions of this instruction document.

The ESR reserves the right to only consider tenders that have no conditions and / or qualifications.

## 2.10. Release of Tender Bond

For the unsuccessful tenderers, the Tender Bond will be released as soon as the tender has been awarded.

For the successful tenderer, the Tender Bond will only be released upon the signing of the Contract and when a performance bond has been received by Eswatini Railways. The successful tenderer shall be required to extend the validity of the Tender Bond accordingly upon award as this may change to become his Performance Bond.

## 2.11. Issuing of Additional Documents

If for any reason during the tender period it becomes necessary to vary the tender documents an addendum will be issued to all tendering Tenderers (for this reason Tenderers' address, telephone, telefax and contact person should be left with ESR when documents are collected).

Should any Tenderer have any queries about the tender, he should refer them in writing to [tenders@swazirail.co.sz](mailto:tenders@swazirail.co.sz) not later than the **23<sup>rd</sup> of December 2022**. All responses shall be shared with the tenderers by the **30<sup>th</sup> of December 2022**.

## 2.12. Incomplete Tenders

Tenderers must complete all required information to the tender. Tenders which are incomplete (i.e., leaving blanks and or not supplying information as required will **NOT** be considered.

### **2.13. Services Required.**

The Eswatini Railways considers quality of service very important as poor-quality service has a lot of hidden operational costs which are costing the Railway a lot of money. Failure to adhere to all the conditions on quality may lead to outright termination of the agreement and blacklisting from further participation in ESR tenders.

### **2.14. Language of Tender**

All correspondence shall be in English.

### **2.15. Laws of Eswatini**

Tendering Companies are advised to familiarise themselves with the Laws of Eswatini e.g., Procurement act, customs, immigration, taxation, and labour laws.

### **2.16. Tender Validity Period**

Tenders shall remain valid and open for acceptance for ninety (90) days from the date of Tender opening.

### **2.17. Currency**

The Tenders shall be priced in Emalangeni. Payment to the successful tenderer will be in Emalangeni only.

### **2.18. Evaluation of Tenders**

Tenderers are advised that in the evaluation of tenders, the ESR is not bound to accept the lowest priced or any tender but a tenderer who is technically responsive and obtains a highest combined score will be awarded contract.

### **2.19. Expenses of Tender**

The ESR will not be responsible for the expenses, which may be incurred by the Tenderer in the preparation of the Tender.

### **2.20. Tender Price Summary**

Tenderers must present their financial proposal separate from the technical proposal and failure to do so shall cause the tender to be rejected.

### **2.21. Tender Price Summary**

### **2.22. Submission of Tender**

The Tenderer must return tender document consisting of:

- xvii. Company Profile, Form J or equivalent for foreign registered companies, Copy of Certificate of Incorporation.
- xviii. Original/Valid Tax Compliance Certificate.
- xix. Certified copy of VAT Registration Certificate.

- xx. Certified copy of valid certificate of registration with CIC category B3 only
- xxi. Declaration of Eligibility; Technical Bid Form; and Financial Proposal Submission Forms.
- xxii. Police Clearance or Affidavit of Non-Conviction for Company Directors.
- xxiii. Audited Financial Statements not older than 12 months on the date of submission of this Tender.
- xxiv. General receipt for purchase of tender document or proof of purchase of tender document.
- xxv. A E5,000.00 Tender Bond.
- xxvi. Financial Proposal in A Separate and Sealed Envelope Marked “Financial Proposal”
- xxvii. Technical Proposal – To include detailed Item Specifications.
- xxviii. Banking Details
- xxix. A Power of Attorney (Letter confirming name(s) of person(s) authorized to sign on behalf of the company).
- xxx. Valid ENPF Compliance Certificate.
- xxxi. Valid Labour Compliance Certificate.

to arrive not later than the date specified in the tender notice or by hand to the ESR Headquarters, Dzeliwe Street, Mbabane building in at the time and the date indicated. The documents should be forwarded in a plain sealed envelope bearing the Tender Number and Tender title on the top left-hand corner and must not bear any name or mark, which would identify the Tenderer. The RFT’s will not be opened publicly.

### **2.23. Non-Discrimination and Measures to Promote Swazi Companies**

Tenders will only be accepted from a company which is registered in Eswatini and of which at least 60% of the controlling shares are owned by Swazi citizens and registered with the Construction Industry Council (CIC) of Eswatini. Tenderers are to adhere all requirements of the Construction Industry Council Including the levy regulations of 2016.

### **2.24. Contact Person at Eswatini Railways**

Information concerning the tender document can be obtained from: The Secretary of the Tender Board, Eswatini Railways, and P. O. Box 475, Mbabane, ESWATINI. TELEPHONE: 2411 7400; FAX: 2411 7499. Emails can be sent to: [Tenders@swazirail.co.sz](mailto:Tenders@swazirail.co.sz)

### **2.25. Rejection of Tenders**

Any Tenderer who does not conform to the above instructions shall be rejected.



## **2.26. Notice of Intention to Award Contract**

An intention to award notice indicating the name of the best evaluated tenderer, the value of the proposed contract and any evaluation scores shall be communicated to all tenderers who submitted tenders. The notice of intention to award will be sent to all tenderers who submitted their bids and published to the ESPPRA website at least 10 working days before the contract award.

## **2.27. Instructions as part of the Contract**

The above-mentioned instructions will form part of the contract.

## **2.28. Tender Withdrawal, modification, or substitution by tenderers**

Tenderers will not be permitted to change the substance of their offers after the tender box has been opened. Tenderers may modify or withdraw their bids after submission, provided that a written notice of modification is received by ESR prior to the deadline for its submission. A withdrawal notice may also be sent to [Tenders@swazirail.co.sz](mailto:Tenders@swazirail.co.sz), but followed by a signed confirmation copy. The changes or modifications shall be initialled in black ink.

## **2.29. Fraudulent practice**

Tenders and their officers, employees, agents, and advisers must not engage in any collusion, anti-competitive conduct or any other similar conduct with any other Tenderer or any other person in relation to the preparation or submission of tenders. In addition to any other remedies available under any law or any contract, the ESR may at its sole discretion immediately reject any tender submitted by a tenderer that engaged in any collusive tendering, anti-competitive conduct or any other similar conduct with any other tenderer or any other person in relation to the preparation or submission of Tenderers.

Any collusion amongst Tenderers or between Tenderers and ESR personnel is forbidden and discovery of any such act will disqualify the Tenderer(s) and result in disciplinary action against the ESR employee. The tender, or contract if it has been concluded already, will be declared invalid if ESR determines that the Tenderer, or any person acting on his behalf, has offered, promised, or given a bribe, gift or other inducement to an officer or employee of ESR with the intention of influencing the award of the contract.

The Tenderer should provide satisfactory evidence acceptable to ESR to show that:

- It is a reputable company who has adequate technical knowledge, professional qualification, and wide experience in performing the desired task.
- It has adequate financial stability and status to meet stipulations under the contract. It is financial solvent and without current judgment or any other financial background which could prevent it from operating bank accounts, raising finance and conducting other activities which are essential to the running of a business.
- It has a qualified and experienced team assigned for the work under this tender.

**Tenderers are advised to provide all relevant information as required.**

### **3. CONDITIONS OF CONTRACT**

#### **3.1. Definition**

“Purchaser” is Eswatini Railways (ESR).

“Days” refer to calendar days.

#### **3.2. General Conditions and Notices**

ESR shall be hereinafter referred to as Employer and the successful tenderer (i.e. the tenderer in whose favour the contract may be awarded) shall be hereinafter referred to as the contractor. To which a contract of Services shall be issued with key performance indicators. Further any notice or other communication whatsoever which ESR is required to give or make to the Tenderer in terms of the contract shall, without prejudice to any other method of giving or making it, be sufficiently given or made if it is sent by post in a letter addressed to the Tenderer at the last place of abode or business of the Tenderer and if the letter is not returned through the post undelivered, such notice or communication shall be deemed for the purpose of the contract to have been given or made at the time at which the letter would in the ordinary course of post have been delivered.

#### **3.3. Tenderer not to sublet the contract.**

The contract shall be considered as a contract made in Eswatini and subject to the “Law of Contract” in Eswatini.

The Tenderer shall not give, bargain, sell, assign, sublet or otherwise dispose of the contract or any part thereof or the benefit or advantage of the contract without the previous consent in writing of ESR.

#### **3.4. Variations**

The price per item shall not be subject to any adjustment whatsoever during the contract period.

#### **3.5. Payment Terms and Conditions**

Payment will be effected on a monthly or annual basis against statements which should be delivered within 30 days before the elapse of the period of cover. Payment will be made within 30 days for the date of receipt of statement.

#### **3.6. Exchange Rate**

Currency fluctuations in the exchange rates between Emalangeni / Rand and the currencies used to purchase imported items quoted in the tender documents shall not affect the prices specified cover.

### **3.7. Breach of terms and conditions**

In case the broker shall be in breach of any of the terms and conditions of this agreement.

### **3.8. Termination by ESR**

ESR, may at any time terminate the contract by giving written notice to the Tenderer if the Tenderer becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Tenderer, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the insured.

### **3.9. Resolution of Dispute**

ESR and the Tenderer shall make every effort to resolve amicably by direct negotiation any disagreement or dispute arising between them under or in connection with the contract.

### **3.10. Mediation or arbitration**

If, after fourteen (14) days from the commencement of such negotiations, the purchaser and the seller have been unable to resolve amicably a contract dispute be referred for adjudication or arbitration in accordance with the laws of Eswatini.

### **3.11. Contractor Liable for all Taxes, Duties, Fees, etc.**

The Tenderer shall be entirely responsible for all taxes, duties, licence fees, etc., incurred until delivery of the contracted service to the Insured.



#### 4. FORM FOR TENDER BOND

WHEREAS Messrs .....

of .....

(Name and address of Tenderer)

Hereinafter referred to as the "Tenderer" has on ..... (Date)

Submitted his Tender/RFP for **Tender No. 08-2023 - Construction of Mpaka ICD Offices**

AND WHEREAS the said Tenderer has undertaken to abide by his Tender so submitted for a period of ninety (90) calendar days from the date of submission hereinabove stated, or such other period as may mutually be agreed between Eswatini Railways, represented by the Chief Executive Officer of Eswatini Railways and the Tenderer, and notified to us by the ESR.

#### NOW, WE,

(Name and address of Financial Institution registered in the Kingdom of Eswatini) hereby guarantee and undertake to pay to the account of the ESR on first demand in writing and without reference to the Tenderer the sum of TEN THOUSAND EMALANGENI (E10, 000.00).

#### PROVIDED THAT

a) This Tender Bond remains valid, and

b) The ESR declares in writing that the Tenderer has failed to abide by his undertaking that the Tender shall remain open for acceptance within the specified period or that the Tenderer is unwilling for some reason (which shall be clearly stated) to abide by his Tender or enter into a Contract Agreement with the ESR per the RFP document.

This Tender Bond shall remain valid in the first instance until .....

(calculated as Ninety (90) calendar days from the date of submission of the said Tender) and will be extended upon written application by the ESR at least one (1) working day in advance of the last date of validity.

.....  
(Authorised Signature)

.....  
(Date)

.....  
(Name of Signatory)

.....  
(Seal/Stamp of Financial Institution)

.....  
(Position of Signatory)





## 5. DECLARATION OF ELIGIBILITY FORM

The bidder must provide a signed declaration in the following format in company letterheads:

[Name of Bidder, Address, and Date]

**TO: THE CHIEF EXECUTIVE OFFICER  
Eswatini Railways  
PO Box 475  
Mbabane H100  
Eswatini**

Dear Sir,

**RE: Tender No: 08 of 2023 – Construction of Mpaka ICD Offices**

We, hereby declare that:

- a) We, have a legal capacity to enter the contract;
- b) We, are not insolvent, in receivership, suspended, bankrupt or being wound up and not subject of any legal proceedings;
- c) We, have not been convicted of any criminal offence related to professional conduct or making of false statement or misrepresentations of qualifications to enter into a contract within a period of five (5) years preceding the commencement of the procurement proceedings;
- d) We do not have a conflict of interest in relation to the procurement requirement.
- e) We have fulfilled our obligations to pay taxes and social security contributions; and adhere to basic labour legislation.
- f) We are not subject to suspension from participating in public procurement; and none of our directors or officers have been involved in a tenderer or supplier currently subject to suspension.

Authorized (Full Name): \_\_\_\_\_

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

## 6. TECHNICAL BID SUBMISSION FORM

The bidder must provide a signed declaration in the following format in company letterheads:

[Name of Bidder, Address, and Date]

**TO: THE CHIEF EXECUTIVE OFFICER**

**Eswatini Railways**

**PO Box 475**

**Mbabane H100**

**Eswatini**

**Dear Sir,**

**RE: Tender No: 08 of 2023 – Construction of Mpaka ICD Offices**

I, the undersigned declare that:

(a) I, the undersigned, offer to provide the above services in accordance with your Request for Proposal and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

(b) We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to disqualification.

(c) If negotiations are held during the period of validity of the Proposal as indicated in Section I, we undertake to negotiate on the basis of the proposal. Our Proposal is binding upon us and subject to the modifications resulting from contract negotiations.

(d) We, undertake, if our proposal is accepted, to initiate and complete the provision of the services in accordance with your requirements.

(e) We understand that Eswatini Railways is not bound to accept the lowest or any proposal.

Yours Sincerely,

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

Full Name : \_\_\_\_\_

Title of Signatory : \_\_\_\_\_



## 7. FINANCIAL PROPOSAL SUBMISSION FORM

*[The Financial Proposal Submission Form should be included in the financial proposal.]*

The bidder must provide a signed declaration in the following format in company letterheads:

[Name of Bidder, Address, and Date]

**TO: THE CHIEF EXECUTIVE OFFICER  
Eswatini Railways  
PO Box 475  
Mbabane H100  
Eswatini**

**Dear Sir,**

**RE: Tender No: 08 of 2023 – Construction of Mpaka ICD Offices**

I, the undersigned declare that:

I, offer to provide the above goods / services in conformity with the Request for Tender at

a total value of (Numerical – specify currency) \_\_\_\_\_; in  
words

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

(b) A detailed financial proposal is attached;

(c) The proposal will be valid for a period of \_\_\_\_\_ (numerical) / \_\_\_\_\_ (words) calendar days from the date fixed for the proposal submission deadline in accordance with the Request for Proposal, and it shall remain binding upon myself, subject to any modifications resulting from negotiations, and may be accepted at any time before the expiration of that period.

(d) I, understand that you are not bound to accept any proposal that you receive;

Yours Sincerely,

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

Full Name : \_\_\_\_\_



Title of Signatory : \_\_\_\_\_

## 8. BILL OF QUANTITIES

### 8.1. PREAMBLES TO SCHEDULE OF QUANTITIES

1. The General Conditions of Contract together with the Specifications, Special Provisions and the Drawings shall be read in conjunction with the Schedule of Quantities and in so far as they have any bearing shall be referred to for details of the description, quality, test and strength of material used and the workmanship, conditions, obligations, liabilities and instructions generally which shall be complied with in carrying out the Contract.
2. The cost of complying with all conditions, obligations and liabilities described in the General Conditions of Contract, Specification and Project requirements and Particular requirements and Particular Specifications and in the Schedule of Quantities, including all overhead charges and profit, costs and expenses that may be required in and for carrying out the work as shown on the drawings shall be deemed to be spread over and included in the prices or sums stated by the Contractor in the Schedule of Quantities.
3. Each item shall be priced and extended to the Amount column by the Contractor with the exception of the items for which a rate only is required, or which already have Provisional Sums attached thereto. If the Contractor omits to price any items in the Schedule of Quantities, then the cost of the work of such items shall be held to be spread over and included in the prices given on other items of work.
4. The quantities of work and materials set forth in the Schedule of Quantities are estimates only and are not to be considered as limiting nor as extending the amount of work to be done and material to be supplied by the Contractor. The works as completed in accordance with the Contract shall be measured and paid for as described in the Schedule of Quantities and in accordance with the General Conditions of Contract, Specification, Project Requirements and

Particular Specifications.

5. The units of measurement described in the Schedules of Quantities are metric units.

Abbreviations used in the Schedule are as follows:

km = kilometre  
m = metre  
m<sup>2</sup> = square metre  
m<sup>3</sup> = cubic metre  
No. = number  
kg = kilogram  
t = ton = 1000 kg  
l = litre  
ha = hectare  
hr = hour

All rates and sums of money quoted in the Schedule of Quantities shall be in Emalangeni.

6. In the event of errors of extension or addition in the priced schedule of Quantities, the rates quoted will be taken as correct.

## 8.2. CONSTRUCTION INDUSTRY COUNCIL LEVY PAYMENT SCHEDULE

1. Reference is made to the CIC Levy Regulation of 2016, procedure, rules, terms, and conditions for levy payment obtainable at the CIC website at [www.cic.co.sz](http://www.cic.co.sz).

The table below informs bidders on the levy payment schedules.

Levy Payment Schedules as gazetted by the Minister of Public Works and Transport as of 10 October 2016.

Minimum Project Cost (E)	Maximum Project Cost (E)	Levy Payable (%)
0	2 000 000.00	1
2 000 001	5 000 000.00	0.8
5 000 001	10 000 000.00	0.75
10 000 001	15 000 000.00	0.6
15 000 001	No Limit	0.5

2. Tenderers are advised to consult with the CIC, and ESR will not be held accountable for the accuracy of the information provided in the table above for levy payment schedules.

## 9. BILLS OF QUANTITIES

### 9.1. Summary Bill of Quantities

CONSTRUCTION OF MPAKA ICD OFFICES SUMMARY BILL OF QUANTITIES		
SECTION	DESCRIPTION	AMOUNT (E)
A	SECTION A: Preliminary and General Items	
B	SECTION B: Main ICD Office Building	
C	SECTION C: Guard House	
D	SECTION D: Weighbridge Control Room	
E	SECTION E: Electrical and Plumbing Works	
F	SECTION F: Dayworks	
G	<b>Total Value of Works</b>	
H	Add 10% Contingencies	
I	<b>Sub-Total (A)</b>	
J	Add CIC Levy at ( ) %	
K	<b>SUB-TOTAL (B)</b>	
L	Add 15% VAT	
<b>TOTAL Bid Price</b>		

### 10.1. SECTION A: Preliminary and General Items

ITEM No.	PAYMENT REF.	Description	Unit	QTY	Rate (E)	Amount (E)
		<b>Preliminary and General Items</b>				
<b>1</b>		<b>Fixed Charge Items</b>				
1.1		Contractual Requirements				
1.2		Site Establishment				
1.3		Facilities for sub-contractors				
1.4		All other fixed charge obligations				
1.5		Water Supplies, Electric Power and Communication				
1.6		Site Removal and rehabilitation				
<b>2</b>		<b>Time related Items</b>				
		(To be paid over the duration of the contract in the ratio of work done to date to the total value of work to be executed in the sections excluding section 1) The final amount to be paid to be equal to 100%)				
2.1		Contractual Requirements	Sum	1		
2.2		Facilities for sub-contractors	Sum	1		
2.3		Supervision for the duration of construction	Sum	1		
2.4		Company and Office overhead costs for the duration of the contract	Sum	1		
2.5		Any other value-related obligations	Sum	1		
<b>3</b>		<b>Other preliminary and General Items</b>				
3.1		As built drawings	Sum	1		



## 10.2. SECTION B: Main ICD Office Building

### PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 2- BUILDERS WORK</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>EARTHWORKS</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Mode Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
	<b><u>SITE CLEARANCE, ETC</u></b>			
1	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris	m2	656	
2	Strip average 200mm thick layer of topsoil and stockpile on site	m2	656	
	<b><u>EXCAVATION OTHER THAN BULK</u></b>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	142	
	<u>Extra over bulk excavation in earth for excavation in:</u>			
4	Soft rock	m3	14	
5	Hard rock	m3	7	
	<u>Risk of collapse of excavations other than bulk:</u>			
6	Sides of trench and hole excavations not exceeding 1.5m deep	m2	405	
	<b><u>CARTING AWAY</u></b>			
	<b>Carried Forward</b>		E	
	Section No. 2 Bill No. 1 EARTHWORKS			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

<b>Brought Forward</b>			E	
<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>				
7	Off site to a dumping site to be found by the Contractor	m3	50	
<b><u>EARTH FILLING, ETC.</u></b>				
<u>Filling with material from the excavations compacted to a density of at least 95% Mod. AASHTO maximum density:</u>				
8	Backfilling to trenches, holes, etc.	m3	53	
<u>Filling with G5 gravel material supplied and carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:</u>				
9	Under floors, trenches, apron, etc.	m3	135	
<u>Filling with insitu material ripped and recompacted material from excavation by the Contractor, compacted to a density of at least 93% Mod. AASHTO maximum density:</u>				
10	Rip, scarify as necessary and compact natural ground and/or excavated surfaces to a density of at least 95% of Mod. AASHTO maximum density for a depth of 150mm under roadways	m2	541	
<u>Coarse river sand filling compacted to 95% Mod. AASHTO maximum density:</u>				
11	Blinding layer under surface beds	m3	18	
<b><u>KEEPING EXCAVATIONS FREE OF WATER</u></b>				
12	Allow for keeping excavations free of water (other than subterranean water) by hand or machinery		Item	
<b><u>TESTS</u></b>				
<b>Carried Forward</b>			E	
Section No. 2 Bill No. 1 EARTHWORKS				

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Prescribed density tests on filling:</u>			
13	"Modified AASHTO Density" test	No	30
<b><u>SOIL POISONING</u></b>			
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>			
14	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming	m2	356
15	To bottoms and sides of trenches, etc	m2	510
<b>Carried Forward to Summary of Section No. 2</b>			E
Section No. 2			
Bill No. 1			
EARTHWORKS			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 3</u></b>			
	<b><u>CONCRETE, FORMWORK &amp; REINFORCEMENT</u></b>			
	<b><u>UNREINFORCED CONCRETE</u></b>			
	<u>Concrete 10 MPa/10mm stone in:</u>			
1	Blinding under footings	m3	5	
2	Filling to hollow walls in foundations	m3	14	
	<b><u>REINFORCED CONCRETE</u></b>			
	<u>Concrete 25 MPa/19mm stone in:</u>			
3	Wall footings	m3	24	
4	Surface beds and thickenings	m3	46	
5	Steps	m3	1	
6	Apron	m3	12	
7	Ramp	m3	1	
	<u>Concrete 30 MPa/19mm stone in:</u>			
8	Gutter slabs	m3	11	
9	Downstand beams	m3	4	
10	Lintols	m3	3	
11	Wall beams	m3	4	
	<b><u>FINISH TOP OF CONCRETE</u></b>			
	<u>Finish top of concrete smooth with a wood float:</u>			
12	Pavings, surface beds, slabs, etc to falls	m2	440	
	<b>Carried Forward</b>			
	Section No. 2			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b><u>CONCRETE TESTING</u></b>			
13	Allow for making set of three concrete test cubes, sending to an approved testing authority for testing and paying all charges in connection therewith (Provisional)	No	54
<b><u>ROUGH FORMWORK</u></b>			
<u>Rough formwork to:</u>			
14	Soffits of gutter slabs including propping exceeding 3.5m and not exceeding 5m high	m2	60
15	Sides of downstand beams	m2	50
16	Sides, soffits of lintols	m2	40
17	Sides of wall beams	m2	50
18	Sides and soffits ramps	m2	1
19	Steppings in foundations not exceeding 300mm high or wide	m	30
20	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	368
21	Edges of concrete not exceeding 300mm high or wide	m	80
<b><u>MOVEMENT JOINTS, ETC.</u></b>			
<u>Expansion joints with 10mm "Sondor Jointex" closed cell expanded polyethylene preformed joint filler and hinged blocking piece:</u>			
22	Joints not exceeding 300mm high or wide between concrete and brick or block walls	m	120
<b><u>REINFORCEMENT</u></b>			
Carried Forward			E
Section No. 2 Bill No. 2 CONCRETE, FORMWORK AND REINFORCEMENT			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Fabric reinforcement:</u>			
23	Type 395 fabric reinforcement in foundation	m2	150
24	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m2	436
<u>Mild steel reinforcement to structural concrete work:</u>			
25	Bars of various diameters	t	0.63
<u>High yield stress steel reinforcement to structural concrete work:</u>			
26	Bars of various diameters	t	0.84
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			

Item No	Quantity	Rate	Amount
<b><u>BILL NO. 4</u></b>			
<b><u>PRECAST CONCRETE</u></b>			
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
<b><u>WINDOW CILLS ETC.</u></b>			
<u>Natural grey precast cills in single lengths bedded in Class I mortar including metal fixing lugs, etc;</u>			
1	75x150x325mm wide window cills set flat and projecting	m	92
2	Precast concrete coping set flat and projecting (Entrance Veranda)	m	10
Carried Forward to Summary of Section No. 2			E
Section No. 2 Bill No. 3 PRECAST CONCRETE			

## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
<b><u>BILL NO. 5</u></b>				
<b><u>MASONRY</u></b>				
<b><u>BLOCKWORK IN FOUNDATIONS</u></b>				
<u>Blockwork in concrete blocks of 7Mpa compressive strength in Class I mortar filled solid with concrete (elsewhere measured)</u>				
1	230mm Thick walls with cavities filled solid with concrete (elsewhere measured) in foundations	m2	113	
<b><u>BLOCKWORK IN SUPERSTRUCTURE</u></b>				
<u>Blockwork in concrete blocks of 7Mpa compressive strength in Class I mortar:</u>				
2	230mm Thick walls	m2	600	
3	115mm Thick walls	m2	195	
<b><u>BLOCKWORK SUNDRIES</u></b>				
<u>Blockwork reinforcement:</u>				
4	155mm Wide reinforcement built in horizontally	m	1,575	
5	80mm Wide reinforcement built in horizontally	m	326	
<u>Galvanised hoop iron cramps, ties, etc:</u>				
6	30 x 1.6mm Roof tie 1.5m long with one end fixed to timber and other end cast into concrete	No	80	
<b>Carried Forward to Summary of Section No. 2</b>				E
Section No. 2 Bill No. 4 MASONRY				





Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 6</u></b>			
	<b><u>WATERPROOFING</u></b>			
	<b><u>WATERPROOFING TO ROOFS, BASEMENTS, ETC</u></b>			
	<u>Derbigum' SP4 waterproofing protected with aluminium paint on sand-cement screed with min thickness of 50mm fall on Isoboard insulation on.</u>			
1	On Gutter Slabs	m2	88	
	<b><u>PROTECTIVE ROOFING PAINT</u></b>			
	<u>One coat "ABE Silvakote" bituminous aluminium paint</u>			
2	On Gutter Slabs etc	m2	88	
	<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>			
	<u>One layer 375 micrometre 'Gunplas Brikgrip' embossed polyethylene damp proof course;</u>			
3	In walls.	m2	42	
	<u>One layer 250 micrometre "Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape";</u>			
4	Under surface beds	m2	356	
	<b><u>JOINT SEALANTS, ETC</u></b>			
	<u>"Polymastic" non-hardening waterproofing compound in pointing all round frames at junction with blockwork or concrete and leave perfectly watertight ;</u>			
5	Steel window or door frames	m	114	
	<b>Carried Forward</b>		E	
	Section No. 2 Bill No. 5 WATERPROOFING			

Brought Forward			E
<u>Approved sealing compound including backing cord, bond breaker, primer, etc.</u>			
6	8 x 30mm In expansion joints in floors	m	120
7	6 x 10mm In saw cut joints in floors	m	120
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 5			
WATERPROOFING			



Item No	Quantity	Rate	Amount
<b><u>BILL NO. 8</u></b>			
<b><u>CARPENTRY AND JOINERY</u></b>			
<b><u>ROOF CONSTRUCTION</u></b>			
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
<b><u>PLATE NAILED TIMBER ROOF TRUSSES, ETC</u></b>			
<u>Plate nailed timber roof truss construction:</u>			
The following is applicable in respect of roof trusses: Trusses are at maximum 1000mm centres. Roof covering is 0.58mm Chromadek roof sheeting at a pitch of not exceeding 25 degrees on treated timber purlins. The trusses are to be in strict accordance with the roof plan as detailed on the Architect's drawings accompanying these Bills of Quantities for tender purposes. The design of the roof structure is to be to the complete satisfaction of the Architect. Actual measurements are to be obtained from the Architect and/or the site before final design or fabrication commences			
<u>Sawn softwood:</u>			
1	38 x 114mm Wall plates	m	136
2	38 x 114mm treated timber rafters	m	463
3	76 x 50mm treated timber purlins	m	432
<b><u>SEMI SOLID DOORS</u></b>			
<b>Carried Forward</b>			E
Section No. 2 Bill No. 7 CARPENTRY AND JOINERY			



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Semi solid doors with commercial veneer covering on both sides, hung to aluminium frames:</u>			
4	40mm Door 813 x 2032mm high -D04	No	5
<b><u>EXTERIOR QUALITY FRAMED DOORS, ETC</u></b>			
<u>Wrot meranti doors hung to steel frames:</u>			
5	813 x 2032x44mm (horizontally slatted ) meranti double sided door-D02	No	2
6	813 x 2032x44mm meranti double sided door - Five fielded panel-D03	No	15
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 7			
CARPENTRY AND JOINERY			



Item No	Quantity	Rate	Amount
<b><u>BILL NO.10</u></b>			
<b><u>FLOOR COVERINGS, WALL LININGS, ETC</u></b>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
<b><u>CORAL ENTRANCE SYSTEM</u></b>			
<u>10mm Guage Mat-Lok Aluguard in closed construction and heel-proof barrier mat, consisting of natural grey electrostatic , buued-nylon tyre-rubber strips, inserted and fixed into modular aluminium scraper sections, together with recess frame AMF31/31 to be screeded in by contractor (elsewhere measured) as supplied by Decramat or similar and/or equally approved:</u>			
1	1500 x 900mm Floor Mat	No	2
2	3000 x 1500mm Floor Mat	No	1
Carried Forward to Summary of Section No. 2			
Section No. 2 Bill No. 9 FLOOR COVERING, WALL LININGS etc			



## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No	Quantity	Rate	Amount
<b><u>BILL NO. 11</u></b>			
<b><u>IRONMONGERY</u></b>			
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
<b><u>HINGES, BOLTS, ETC</u></b>			
<u>"Dorma" or similar and or equally approved:</u>			
1	DORMA CTC 325x25-76mm prjection stainlesssteel bolt through pull handle-Code DPH301B BT	No 88	
2	Bush bolts Code FBADM	No 22	
3	Barrel bolt heavy duty 150x32mm satin chrome-Code BHD 150	No 22	
4	Nickel bolt heavy duty 150x32mm satin chrome-Code NBHD 150	No 22	
5	Dorma stainlesssteel WC indicator with 79mm turn knob for physically impaired -Code DWC-006	No 5	
<b><u>LOCKS</u></b>			
<u>"Dorma" or similar and or equally approved:</u>			
6	Dorma nickel plated 66mm tem pin euro grand masterkeyed single cylinder- Code DDC106601 GMK	No 20	
7	DORMA WC dead lock -Code D032D SS	No 5	
<b><u>HANDLES</u></b>			
<b>Carried Forward</b>			E
Section No. 2 Bill No. 10 IRONMONGERY			





PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>"Dorma" or similar and or equally approved:</u>			
8	DORMA solid stainlesssteel lever handles with rose and cylinder hole escutcheons-Code SH810	No 20	
9	DORMA 400x32mm stainlesssteel T shaped straight back to back pull handles (BTB fixing sets)-Code DPH 205T BTB	No 2	
<b><u>DOOR CLOSERS</u></b>			
<u>"Dorma" or similar and or equally approved:</u>			
10	Dorma EN3 slide channel door closer. NON HOLD OPEN. Pull side- leaf or transom fixing; Push side- leaf or transom fixing - Code TS91B	No 20	
<b><u>PUSH PLATES AND KICKING PLATES</u></b>			
<u>"Dorma" or similar and or equally approved:</u>			
11	DORMA 62x44mm stainlesssteel flush ring pull-Code DRP-SS-023	No 22	
<b><u>LETTERS, NAMEPLATES, ETC.</u></b>			
<u>"Dorma" or similar and or equally approved:</u>			
12	DORMA DSS-130 stainless steel 150x150mm MALE sign or similar and or equally approved	No 1	
13	DORMA DSS-130 stainless steel 150x150mm FEMALE sign or similar and or equally approved	No 1	
14	Dorma PHA three point locking emergency exit device for doors up to 1000mm wide and 2270mm high - Code PHA3/S	No 2	
15	Dorma stainlesssteel electric sign - Code DSS 136	No 6	
16	Dorma stainlesssteel cleaner sign	No 1	
17	290 x 290mm Extinguisher signs	No 4	
Carried Forward			E
Section No. 2 Bill No. 10 IRONMONGERY			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
18	290 x 290mm arrow signs	No	4
19	Dorma man running sign-Code DSS-141	No	2
<b>WINDOW BLINDS</b>			
<u>"Dorma" or similar and or equally approved:</u>			
20	Anodised aluminium blinds including all fixing brackets, stopped ends, bends, etc., with brackets plugged	m	41
<b>BATHROOM FITTINGS</b>			
<u>"Bidvest Products" or similar and or equally approved:</u>			
21	Bidvest steiner 2 roll toilet roll holder, lockable	No	5
22	Toilet brush set with holder and wall mounting screws and rawl plugs	No	5
23	Automatic hand drier	No	3
24	Automatic paper towel dispenser	No	2
25	Refillable soap dispenser, sateen	No	3
26	She sanitary bin, sateen	No	1
<b>SUNDRIES</b>			
<u>"Dorma" or similar and or equally approved:</u>			
27	Dorma stainlesssteel hat and coat hook with rubber buffer Code DHC-SS-031-B	No	9
28	DORMA.DDS-NP-018 nickel plated floor stop or similar and or equally approved	No	22
<b>Carried Forward to Summary of Section No. 2</b>			E
Section No. 2 Bill No. 10 IRONMONGERY			

## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
<b><u>BILL NO. 12</u></b>				
<b><u>METALWORK</u></b>				
<b><u>ALUMINIUM WINDOWS AND DOORS.</u></b>				
<u>Purpose made "BRONZE" anodised powder coated aluminium window frames with and including toughed 4.0mm thick clear float glass;</u>				
1	Window size 1028x1500mm high - W03	No	12	
<u>Purpose made "BRONZE" anodised powder coated aluminium window frames with and including toughed 6.38mm thick clear float glass;</u>				
2	Window size 5182x1500mm high - W02	No	4	
3	Window size 4679x2100mm high - W01	No	1	
<u>Purpose made "BRONZE" anodised powder coated aluminium window frames with and including toughed 4.0mm thick frosted glass;</u>				
4	Window size 2003x680mm high - W04	No	17	
5	Window size 1382x949mm high - W05	No	4	
6	Window size 650x949mm high - W06	No	4	
<u>Purpose made "BRONZE" anodised powder coated aluminium doors and frames with and including toughed 6.38mm thick safety and black tinted glass;</u>				
7	Folding door size 1774 x 2350mm high -D01	No	2	
<b><u>RAINWATER DISPOSAL</u></b>				
<b>Carried Forward</b>				E
Section No. 2 Bill No. 11 METALWORK				

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Galvanised rainwater goods:</u>			
8	100x100mm boxed gutter fixed to falls on and including steel brackets spaced at 1000mm centres and screwed to 0.4mm thick side flashing	m	136
<u>Extra on chromadek gutters for the following fittings:</u>			
9	Stopped end	No	8
10	Angle	No	8
11	Outlet with nozzle piece for and joint to 76mm galvanised rainwater pipe	No	8
12	76mm galvanised steel pipe fixed to wall with steel holderbats	m	8
<u>Extra on galvanised steel piping for the following fittings:</u>			
13	76mm Bend	No	8
14	76mm Shoe	No	8
15	76mm Swanneck 600mm projection	No	8
<b><u>FULL BORES</u></b>			
<u>Extra on galvanised steel fullbore inlets:</u>			
16	Saint-Gobain 90 degrees side roof threaded outlet-3585 dome type	No	6
<b>Carried Forward to Summary of Section No. 2</b>			E
Section No. 2			
Bill No. 11			
METALWORK			

## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No	Quantity	Rate	Amount
<b><u>BILL NO. 13</u></b>			
<b><u>PLASTERING</u></b>			
<b><u>SCREEDS</u></b>			
<u>Screeds (1:3) as described on concrete:</u>			
1	50mm Thick screed to falls	m2	60
2	25mm Thick on floors and landings	m2	356
<b><u>INTERNAL PLASTER</u></b>			
<u>One coat cement plaster (1:5) as described on blockwork on:</u>			
3	Walls	m2	1,254
4	Narrow widths	m2	63
5	Concrete soffits	m2	60
<u>One coat rhino plaster (1:5) as described on:</u>			
6	Rhinoboard ceilings	m2	296
<b><u>EXTERNAL PLASTER</u></b>			
<u>One coat cement plaster (1:5) as described on blockwork on:</u>			
7	Walls	m2	336
8	Narrow widths	m2	17
<b>Carried Forward to Summary of Section No. 2</b>			E
Section No. 2 Bill No. 12 PLASTERING			



## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No	Quantity	Rate	Amount
<b><u>BILL NO. 14</u></b>			
<b><u>TILING</u></b>			
<b><u>WALL TILING</u></b>			
Porcelain wall tiles size 600 x 200 (P.C.E 350/m2) as described fixed with adhesive to plaster (plaster elsewhere measured) on:			
1 Walls	m2	245	
2 Narrow widths	m2	12	
<b><u>FLOOR TILING</u></b>			
600 x 600mm "Porcelain " or similar and or equally approved floor tiles ( P.C. E 360/m2) fixed with adhesive to powerfloated or screed surfaces (elsewhere measured):			
3 On floors	m2	330	
4 100mm skirting	m	346	
<b><u>SUNDRIES</u></b>			
Extra over for tiling :			
5 Transition stainlesssteel strip	m	120	
Carried Forward to Summary of Section No. 2			E
Section No. 2 Bill No. 13 TILING			



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 15</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SOIL DRAINAGE</u></b>			
	<u>Underground sewer and drainpipe grade rigid UPVC pipes:</u>			
1	110mm Pipe fixed vertically in ground (no excavation)	m	10	
2	160mm Pipe laid in ground including excavation exceeding 1m deep and not exceeding 2m deep	m	223	
	<u>Extra on UPVC piping for the following fittings:</u>			
3	110mm Bend	No	5	
4	160mm Bend	No	6	
5	160mm Coupling	No	37	
6	110mm Access bend	No	5	
7	110mm Access junction	No	5	
8	110mm Diameter gulley trap jointed to drain, complete with hopper head and grid and the whole set on and encased in un reinforced concrete Class B 15/20 carried up 75mm above ground as kerb, dished down to grating and finished on all exposed faces in 1:3 cement render with angles rounded, including necessary excavation and formwork	No	3	
	<u>Inspection chambers and manholes:</u>			
9	Excavate for and build inspection chamber fitted with 450 x 600mm x 124kg cast iron double seal manhole cover and frame. Size internally 450 x 600 x average 1100mm deep	No	5	
	<b>Carried Forward</b>		E	
	Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			





PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E	
<b><u>Connection to public sewer</u></b>				
10	Allow the NETT provisional amount of E10 000.00 (Ten Thousand Emalangeni) for connection to public sewer executed complete	Item		10,000.00
<b><u>SANITARY FITTINGS</u></b>				
<u>Supply, fix, clean, wash and leave in a satisfactory condition the following items of medical sanitaryware:</u>				
All rails, brackets, etc., where not bolted are to be fixed with long heavy gauge brass screws into approved expanding plugs				
11	<b>WATER CLOSET – Cobra Toilets – Concepts – WC-2360-000</b> Wash down, dual flush close couple toilet. Includes pan, and cistern including dual flush valve. Soft close seat. Wash down type toilet size: 370W X 640L X 785H. Universal trap.	No	5	
12	Vaal lavatory wall hung urinal complete with flush valve inlet.	No	2	
13	Cobra square sit on basin set including waste and trap elsewhere measured	No	5	
14	Franke single end double bowl sink	No	1	
15	Shower door – frameless swing door – to be measured on site 1900mm (H) door	No	4	
<b><u>SANITARY PLUMBING</u></b>				
<u>Unplasticized polyvinyl chloride (UPVC) pipes:</u>				
16	50mm Pipe	m	72	
17	110mm Pipe	m	20	
Carried Forward			E	
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE				



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Extra on UPVC piping for the following fittings:</u>			
18	50mm Vent cowl	No 5	
19	110mm Vent cowl	No 5	
20	50mm Bend	No 12	
21	110mm Bend	No 5	
22	50mm Access bend	No 12	
23	110mm Access bend	No 5	
24	50mm Junction	No 12	
25	110mm Junction	No 5	
26	50mm Access junction	No 12	
27	110mm Access junction	No 5	
28	110mm Pan piece with enlarged socket for and joint to outlet of W.C. pan	No 5	
29	50mm Vent valve	No 5	
30	110mm Vent valve	No 5	
<b><u>TRAPS</u></b>			
<u>Brass traps, waste unions, etc:</u>			
31	Shallow seal P trap with chrome plated grating Code 373SQ - TRAP	No 1	
32	Gio A181 0 32 Bottle trap round 32 x 32 DBA 181	No 5	
<b><u>WATER SUPPLIES AND FIRE SERVICES</u></b>			
Carried Forward			E
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Class 460/0 copper pipes:</u>			
33	15mm Pipe	m	72
34	22mm Pipe	m	72
35	28mm Pipe	m	20
<u>Extra over class 460/0 copper pipes for the following copper capillary fittings:</u>			
36	15mm Fitting	No	80
37	22mm Fitting	No	80
<u>Extra over Class 460/0 copper pipes for the following brass compression fittings:</u>			
38	15mm Fitting	No	80
39	22mm Fitting	No	80
<u>Extra over Class 460/1 copper pipes for the following capillary fittings:</u>			
40	15mm Fitting	No	80
41	22mm Fitting	No	80
<u>Extra over Class 460/1 copper pipes for the following brass compression fittings:</u>			
42	15mm Fitting	No	80
43	22mm Fitting	No	80
<u>Class 16 UPVC pressure pipes:</u>			
44	25mm Pipe laid in ground including excavation not exceeding 1m deep	m	20
45	32mm Pipe laid in ground including excavation not exceeding 1m deep	m	50
Carried Forward			E
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
46	50mm Pipe laid in ground including excavation not exceeding 1m deep	m	30
47	75mm Pipe laid in ground including excavation not exceeding 1m deep	No	30
<u>Extra over UPVC pressure pipes for the following HDPE PN16 pressure fittings:</u>			
48	25mm fittings	No	10
49	50mm fittings	No	10
50	90mm fittings	No	10
<u>Extra over UPVC pressure pipes for the following cast iron pressure fittings:</u>			
51	75x3 compression male adaptor	No	4
52	50mm HDPE PN 16 Male Iron	No	4
53	90mm HDPE PN 16 Male Iron	No	4
<u>Extra over galvanised mild steel pipes for the following galvanised mild steel fittings:</u>			
54	25mm Pipe	m	18
55	80mm Pipe	m	6
56	80mm socket	No	1
57	25mm galvanised socket	No	3
58	50mm galvanised elbow 90 degrees	No	5
59	Cut and threading all galvanised pipes	No	1
Carried Forward			E
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b><u>TAPS, VALVES, ETC</u></b>			
60	Single lever basin mixer CODE BE-951-BASIN MIXER with 1/2" BSP female inlets SANS 1480 with basin mixer 1/2" female iron 400mm long flexible hoses with 6L/minute flow restrictor with spare part of flat cartridge S-SE950-1-F, connection tubes C-M110X1/2, handles S-BE950-3A	No	5
61	Tivoli Molveno chrome pillar type sink mixer, 15mm complete with sink waste	No	1
62	Tivoli Orta Shower mixer, KU; TVOR 3700/CH	No	4
63	CTM, Tivoli Taps, jade Range, Bath/shower Mixer, Code TVJD9020/CH	No	4
64	<b>Rose</b> : Botonto round shower head, 20mm diam brushed stainless steel . SKU: VSH 1225/CH with <b>Arm</b> : Thin shower arm 128mm, SKU: HGSH 27411 and <b>Botonto round shower head</b> , 20mm diam brushed stainless steel . SKU VSH 1225/CH	No	4
65	Wirquin Twisto square shower waste, anti – syphon, SKU : WRSW 001	No	4
66	15mm Chromium plated "Master Ballstop" or similar and/or equally approved in-line flow control and shut-off valve and joints to copper pipes	No	4
67	15mm Brass screw down stoptap as "Cobra 131" or similar and/or equally approved and joints to copper pipes	No	4
68	22mm Brass screw down stoptap as "Cobra 131" or similar and/or equally approved and joints to copper pipes	No	4
69	22mm Brass screw down bib-tap with and including hose connection as "Cobra 108" or similar and/or equally approved and joint to brass connector (elsewhere measured)	No	6
Carried Forward			E
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
70	15mm Chromium plated brass screw down bib-tap as "Cobra 106 Star" or similar and/or equally approved complete with chromium plated extension piece 75mm long with wall flange as "Cobra 059" or similar and/or equally approved and joint to brass connector (elsewhere measured)	No	4
71	50mm Brass fullway screw down wheelhead gate valve as "Cobra 1001/125" or similar and/or equally approved and joint to brass connector (elsewhere measured)	No	1
72	22mm Brass fullway screw down wheelhead gate valve as "Cobra 1003/125" or similar and/or equally approved and joints to copper pipes	No	4
73	28mm Brass fullway screw down wheelhead gate valve as "Cobra 1003/125" or similar and/or equally approved and joints to copper pipes	No	2
74	22mm Vacuum breaker as "Cobra PB1.10" or similar and/or equally approved and joint to brass connector (elsewhere measured)	No	4
75	25mm Safety valve as "Braukmann KB 1.51" or similar and joint to tank and brass connector (elsewhere measured)	No	2
76	50mm Pressure control valve as "Braukmann DO6F KA2.24" or similar fitted with and including pressure gauge as "Braukmann KA2.240", and joint to brass connector (elsewhere measured)	No	2
<b><u>ELECTRIC WATER HEATERS</u></b>			
Carried Forward			E
Section No: 2 Bill No. 14 PLUMBING AND DRAINAGE			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>"Kwikot":</u>			
77	100 litre "Kwikot Megaflow" horizontal type hot water heater with two kilowatt element and emergency over-pressure relief valve, and hoist and place in position on bearers (elsewhere measured) in roof space and connections to two 22mm copper pipes including connectors. (Electrical Connection by Electrician)	No	2
<b><u>FIRE APPLIANCES, ETC</u></b>			
<u>"Chubb" or similar and or equally approved:</u>			
78	"Everyway" or similar and or equally approved hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	2
79	2.5kg Ozone friendly BCF fire extinguisher	No	4
80	9kg Ozone friendly dry chemical fire extinguisher	No	4
81	4.5kg Ozone friendly carbon dioxide fire extinguisher	No	4
<u>Fire hydrant:</u>			
82	Unreinforced concrete Class C (1:2.5:3.5) hydrant pedestal 900mm high cast around vertical pipe with bottom 300mm below ground, 300 x 300mm square at base and tapering to octagonal shaped top 200 x 200mm overall, including necessary excavation, formwork and two coats of approved paint to exposed surfaces	No	1
83	80 x 65mm Brass right angle hydrant valve with cap and chain	No	1
Carried Forward			E
Section No. 2 Bill No. 14 PLUMBING AND DRAINAGE			

Brought Forward		E	
<b>TESTING</b>			
84	Allow for testing the whole of the Sanitary Plumbing, Water Supplies and Fire Services to the satisfaction of the Architect and Local Authorities. All defective work is to be taken out and replaced at the Contractor's expense and the whole re-tested until found satisfactory	Item	
Carried Forward to Summary of Section No. 2		E	
Section No. 2			
Bill No. 14			
PLUMBING AND DRAINAGE			







PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 17</u></b>			
	<b><u>PAINTWORK</u></b>			
	<b><u>PAINT ON PLASTER, ETC</u></b>			
	<u>One coat plaster primer and two finishing coats "Dulux" acrylic PVA paint on;</u>			
1	Plastered walls internally	m2	1,317	
2	Concrete soffits	m2	60	
3	Rhino plastered ceilings	m2	296	
	<u>One coat plaster primer and two finishing coats "Dulux" acrylic PVA paint on;</u>			
4	Plastered walls externally	m2	353	
	<b><u>PAINT ON METAL</u></b>			
	<u>One coat calcium plumbate primer on;</u>			
5	General surfaces	m2	29	
	<b><u>PAINT ON WOOD</u></b>			
	<u>One coat undercoat and two coats gloss enamel on;</u>			
6	Cills not exceeding 300mm girth	m	41	
	<u>Three coats polyurethane clear varnish</u>			
7	General surfaces.	m2	72	
	<b>Carried Forward to Summary of Section No. 2</b>			
	Section No. 2			
	Bill No. 16			
	PAINTWORK			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO.18</u></b>			
	<b><u>EXTERNAL WORKS (PROVISIONAL)</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
	<b><u>SURFACE WATER CHANNELS</u></b>			
	<u>Cast insitu concrete surface water 'U' shaped channels, etc:</u>			
1	100mm Thick concrete Class B (1:3:5) 'U' shaped open surface water channel size internally 650 wide x 550mm deep reinforced with mesh ref 193, all rendered with smooth finish on exposed faces with salient angles rounded, cast in lengths not exceeding 1000mm and laid to falls, including all necessary excavation, filling in and ramming earth around and all necessary formwork	m	60	
2	Extra on concrete surface water channels for stopped end, angle intersection, tee intersection, dressing into sides of channels, etc	No	10	
	<u>Formwork:</u>			
3	Smooth formwork to sides of surface water channel	m2	36	
	<b><u>LANDSCAPING</u></b>			
	<u>Earthworks</u>			
4	Load from spoil heaps, transport and re-spread top soil (elsewhere measured) over site and grade to an even surface ready for planting.	m3	30	
	<u>Grassing of roots in rows:</u>			
5	"Buffalo" grass over site platforms and banks	m2	100	
	<b>Carried Forward to Summary of Section No. 2</b>			E
	Section No. 2			
	Bill No. 17			
	EXTERNAL WORKS			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 19</u></b>			
	<b><u>PROVISIONAL AMOUNTS, ETC</u></b>			
	<b><u>PROVISIONAL AMOUNTS</u></b>			
	<u>Reception desk installation</u>			
1	Allow the NETT provisional amount of E80 000.00 (Eighty Thousand Emalangeni) for reception desk installation executed complete	Item		80,000.00
2	Profit	Item		
3	Attendance	Item		
	<u>Joinery work installation</u>			
4	Allow the NETT provisional amount of E60 000.00 (Sixty Thousand Emalangeni) for joinery work installation executed complete	Item		60,000.00
5	Profit	Item		
6	Attendance	Item		
	<u>Kitchen Fittings Installation</u>			
7	Allow the NETT provisional amount of E50 000.00 (Fifty Thousand Emalangeni) for kitchen fittings installation executed complete	Item		50,000.00
8	Profit	Item		
9	Attendance	Item		
	<u>Landscaping</u>			
10	Allow the NETT provisional amount of E30 000.00 (Thirty Thousand Emalangeni) for landscaping executed complete.	Item		30,000.00
	<b>Carried Forward</b>		E	
	Section No. 2 Bill No. 18 PROVISIONAL AMOUNTS			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward		E	
11	Profit	Item	
12	Attendance	Item	
<u>General Signage Installation</u>			
13	Allow the NETT provisional amount of E35 000.00 (Thirty Five Thousand Emalangeni) for general signage installation executed complete	Item	35,000.00
14	Profit	Item	
15	Attendance	Item	
<u>Steel lockers installation</u>			
16	Allow the NETT provisional amount of E80 000.00 (Eighty Thousand Emalangeni) for steel lockers installation executed complete	Item	80,000.00
17	Profit	Item	
18	Attendance	Item	
<u>Fire Signage Installation</u>			
19	Allow the NETT provisional amount of E15 000.00 (Fifteen Thousand Emalangeni) for fire signage installation executed complete	Item	15,000.00
20	Profit	Item	
21	Attendance	Item	
<u>Services Connection</u>			
22	Allow the NETT provisional amount of E10 000.00 (Ten Thousand Emalangeni) for Services Connection executed complete	Item	10,000.00
<b>Carried Forward to Summary of Section No. 2</b>		E	
Section No. 2			
Bill No. 18			
PROVISIONAL AMOUNTS			

## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

<b>Bill No</b>	<b>SECTION SUMMARY - Section No.2 - Builders Work</b>	<b>Page No</b>	<b>Amount</b>
1	EARTHWORKS	4	
2	CONCRETE, FORMWORK AND REINFORCEMENT	7	
3	PRECAST CONCRETE	8	
4	MASONRY	9	
5	WATERPROOFING	11	
6	ROOF COVERINGS	12	
7	CARPENTRY AND JOINERY	14	
8	CEILINGS, PARTITIONS AND ACCESS FLOORING	15	
9	FLOOR COVERING, WALL LININGS etc.	16	
10	IRONMONGERY	19	
11	METALWORK	21	
12	PLASTERING	22	
13	TILING	23	
14	PLUMBING AND DRAINAGE	32	
15	GLAZING	33	
16	PAINTWORK	34	
17	EXTERNAL WORKS	35	
18	PROVISIONAL AMOUNTS	37	
	<b>Carried to Final Summary</b>		E
	Section No. 2		



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO 3 - ELECTRICAL INSTALLATION</u></b>			
	<b><u>BILL NO. 1</u></b>			
	<b><u>PRELIMINARIES AND GENERALS</u></b>			
1	<b>Compliance with conditions.</b> Nett price for compliance with condition of contract and various specifications which cost are not specifically covered elsewhere or by unit rates (including all risks insurance)		SUM	
2	<b>Surety.</b> Allow the provision of a performance guarantee		SUM	
3	<b>All other obligations</b>		SUM	
	<b><u>SPECIAL PRELIMINARY AND GENERAL CONDITIONS PERTAINING TO THIS SUB-CONTRACT</u></b>			
4	<b>Site establishment.</b>		SUM	
5	<b>Transport.</b> Provide and arrange transport of all electrical material and equipment to site as well as workmen and staff		SUM	
6	<b>Commissioning and testing.</b> Supply all test equipment and labour for testing, commissioning and adjustments of all portions of the installation		SUM	
7	<b>As-built drawings.</b> Provide schematic diagrams and drawings for electrical installation:		SUM	
8	<b>Allow for completing all formalities, issuing all notices and paying all fees due in respect of the installation to the Supply Authority</b>		SUM	
9	<b>All notices and safety equipment as required by law</b>	Item		
	<b>Carried Forward to Summary of Section No. 3</b>		E	
	Section No. 3 Bill No. 1 PRELIMINARIES AND GENERALS			

Item No	Quantity	Rate	Amount
<b>BILL NO. 2</b>			
<b><u>DISTRIBUTION BOARDS</u></b>			
<b><u>Supply and install galvanised steel kiosk and distribution boards with lockable doors complete with all equipment as shown on the drawings.</u></b>			
1	Supply, connect and install SU3x24way + SU3 tray distribution, board flush mounted with lockable doors complete with busbars, neutral and bars, labels, blank covers, provision for future circuit, breakers etc to accommodate the switchgear as shown in the drawing.	No	1
<b><u>Supply, connect and install the following circuit breakers for the Distribution boards as shown on the schematic diagram</u></b>			
2	Main circuit breaker 100A 3phase 10kA CBI (black)	No	2
3	63A earth leakage unit 3kA without overload CBI (black)	No	6
4	80A SP 3kA CBI (black)	No	6
5	30A SP 3kA CBI (black)	No	3
6	20A SP 3kA CBI (black)	No	17
7	10A SP 3kA CBI (black)	No	15
Carried Forward to Summary of Section No. 3			E
Section No. 3 Bill No. 2 DISTRIBUTION BOARDS			





PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>POWER RETICULATION AND KIOSK INSTALLATION</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>Distribution Kiosk</u></b>			
1	Supply, connect and install the Main Metering Distribution Kiosk. YBK 12 way Fibre Kiosk with two lockable doors including copper bars, earth bar, all bonded to the earth bar free standing on concrete base, to accommodate switch gear Heineman type.	No	1	
2	Main Breaker 250A TP MCCB Fucks F25D CBI	No	1	
3	200A TP MCB 25kA CBI Switch disconnecter (JSN150)	No	1	
4	150Ab TP 25kA CBI circuit breaker (black)	No	1	
5	100A TP 6kA CBI circuit breaker (black)	No	1	
	<b><u>Power Reticulation</u></b>			
	<u>All cables to be PVC/PVC/SWA/ PVC with stranded copper conductors, and SABS approved including termination :</u>			
6	35mm 4-core PVC/SWA/PVC underground cable	m	100	
7	25mm earth wire bare copper cable to run with above cable	m	100	
8	25mm 4-core PVC/SWA/PVC underground cable	m	150	
9	16mm earth wire bare copper cable to run with above cable	m	150	
	<b><u>Sleeves</u></b>			
	<b>Carried Forward</b>		E	
	Section No. 3 Bill No. 3 POWER RETICULATION AND KIOSK INSTALLATION			



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<u>Supply PVC sleeves piping including short lengths and jointing laid in trench (trench backfilling measured elsewhere)</u>			
10	Ø110mm PVC entry sleeves (6m)	m	15
11	100mm Bends	No	8
12	Ø50mm PVC entry sleeve(6m))	m	6
13	Ø50mm PVC Bend	No	5
14	Ø32mm PVC entry sleeve(6m)	m	4
15	Ø32mm PVC Bend	No	6
<u>Trenching &amp; Manholes</u>			
16	Trenching 600mm deep, in pickable soil.	m	20
17	Trenching 1000mm deep, in pickable soil.	m	10
18	Manhole 1200x1200 with cast iron cover.	No	4
<b>Carried Forward to Summary of Section No. 3</b>			E
Section No. 3 Bill No. 3 POWER RETICULATION AND KIOSK INSTALLATION			

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 4</u></b>			
	<b><u>LIGHTING OUTLETS INSTALLATION</u></b>			
	<b><u>LIGHTING OUTLETS</u></b>			
	<b><u>Supply and install light points as specified:</u></b>			
	<u>Light points shall be complete with 20mm pvc conduit, 2.5mm<sup>2</sup> wiring and 2.5mm<sup>2</sup> I.C.E.W unless otherwise specified</u>			
	<u>Light switch points shall be complete with conduit, wiring and 100 x 50mm steel box</u>			
	<u>Light switches shall be 20A with white steel plate cover plate</u>			
1	1 lever 1 way light switch flush mounted (crabtree)	No	12	
2	1 Lever 2 way light switch flush mounted (crabtree)	No	6	
3	2 Lever 1 way light switch flush mounted (crabtree)	No	2	
4	3 Lever 1 way light switch flush mounted (crabtree)	No	1	
5	2 Lever 2 way light switch flush mounted (crabtree)	No	3	
6	230v National Panasonic NS216 Photocell complete with manual bypass switch (Day-light swicht)	No	1	
	<b><u>2. LUMINAIRES</u></b>			
	<b><u>Supply, install and connect as specified:</u></b>			
7	Supply, connect and Install lighting points, conduiting to be complete with 20mm PVC conduit and accessories, 1.5mm wiring and 1.5mm insulated earth wire.	No	175	
	<b>Carried Forward</b>			
	Section No. 3 Bill No. 4 LIGHTING OUTLETS INSTALLATION		E	

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

	Brought Forward			E
8	Type A - 3x28W LED 1200mm x 600mm 4ft Recessed perforated fluorescent light fitting (Radiant KR46E) and LED 4ft Fluorescent tubes or equally approved.	No	22	
9	Type B - Bulkhead Die Cast Aluminium Weather Proof Cylindrical wall mounte luminaire, corrosion resistant, dust proof, IP 65, complete with 2x18W E27 globe, Lascon Code B12-2PL26-ELB black or equally approved.	No	12	
10	Type C - Steel Recessed body downlight with 70mm cutout diameter complete with GU10 5W globe, Radiant code CB 15 or equally approved.	No	36	
11	Type D, 1x9W LED E27 230V ceiling light fitting (bright star CH005 similar or equally approved).	No	7	
12	Emergency illumination EXIT light fitting complete wiring similar or equally approved).	No	4	
13	Type E - Lascon LED double fluorescent fitting complete with 2x 18W LED tubes.	No	10	
Carried Forward to Summary of Section No. 3				E
Section No. 3				
Bill No. 4				
LIGHTING OUTLETS INSTALLATION				

Item No		Quantity	Rate	Amount
	<b>BILL NO. 5</b>			
	<b>POWER OUTLETS INSTALLATION</b>			
	<b>POWER OUTLETS</b>			
	<u>Supply and install power outlets and wiring as specified:</u>			
	<u>Socket outlets to be switched 16A single phase round 3 pin complete with 20mm diameter pvc conduit and accessories, 2.5mm<sup>2</sup> pvc wiring, and 2.5mm<sup>2</sup> Insulated Earth Wire, 100 x 100mm steel conduit box and socket with flush white steel cover, unless otherwise specified</u>			
	<u>Isolators to be complete with 20mm diameter pvc conduit and accessories, 2.5mm<sup>2</sup> wiring, and 2.5mm<sup>2</sup> Insulated Earth Wire, unless otherwise specified, 100 x 100mm steel conduit box, flush white cover and concealed 20mm diameter pvc conduit connection to a round flush mounted outlet box</u>			
1	Supply, connect and install the switch socket outlet points of crabtree manufacture 16A single phase 3-pin socket outlet, conduiting to be complete with 20mm PVC conduit, adaptors, couplings and accessories 2.5mm wiring and 2.5mm insulated earth wire and switch socket with white coverplate.	No	100	
	<u>Supply, connect and install the following power points complete with conduit and wiring as specified shown on drawings.</u>			
2	16A 3-pin crabtree Single socket outlets wall mounted + complete	No	15	
3	16A 3-pin crabtree double socket outlet wall mounted + complete with cover plate	No	6	
	<b>Carried Forward</b>			
			E	
	Section No. 3 Bill No. 5 POWER OUTLETS INSTALLATION			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b><u>Power Skirting</u></b>			
4	Supply 2 Channel CABSTRUT power skirting N8/P801 Hospital grey (dimensions 55 x 165 x 3000mm) complete with galvanised covers and knockouts to accommodate socket outlets, RJ11 telephone outlets, RJ 11 Fax outlets & RJ 45 Data outlets mounted on brickwork, concrete, steel, wood including end cap, flat elbow, flat tee, internal elbow, external elbow, cover joint clips, complete with all accessories.	m	102
5	16A 3-pin wall mounted Single socket outlet complete with cover plate mounted on Power Skirting	No	35
<b><u>Fixed Appliances Installation</u></b>			
6	Supply and install stainless steel automatic hand drier (similar or equal approved) points complete with wiring conduits, adaptors, couplings, Isolator, and accessories, insulated earth wire and switch socket with white cover plate, 4mm wiring and 4mm insulated earth wire.	No	2
<b>Carried Forward to Summary of Section No. 3</b>			E
Section No. 3			
Bill No. 5			
POWER OUTLETS INSTALLATION			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 6</u></b>			
	<b><u>FIRE DETECTION INSTALLATION</u></b>			
	<b><u>FIRE ALARM INSTALLATION</u></b>			
	<b><u>Supply and install fire alarm equipment as specified:</u></b>			
1	Supply and install six zone Alarm Annunciator Panel- Zitron TCP	No	1	
2	600 x 600 x 150mm deep flush wall mounted 6 zone Alarm Panel - Zitron TCP	No	1	
3	Fire alarm outlet point, complete with 25mm diameter PVC conduit and fire resistant wiring of appropriate sizes	No	22	
4	Breakglass unit connected to fire alarm outlet	No	4	
5	Smoke detector unit connected to fire alarm outlet: Zitron Smoke detector unit - Z310	No	15	
6	Heat detector unit connected to fire alarm outlet: Zitron heat detector unit - Z310	No	1	
7	Electronic siren connected to fire alarm outlet	No	2	
8	4 Sets of operating instructions	Item		
9	300 x 300 x 150 mm Deep weather Proof flush mounted draw box Complete with steel lockable door (Colour white)	m	30	
10	32mm Diameter pipe	m	60	
11	50mm Diameter pipe	m	80	
	<b>Carried Forward to Summary of Section No. 3</b>			
	Section No. 3			
	Bill No. 6			
	FIRE DETECTION INSTALLATION			



Item  
No

Quantity

Rate

Amount

**BILL NO. 7**

**LIGHTNING PROTECTION**

Lightning Protection System shall be supplied and installed to conform with SABS and as described below:

Roof conductors shall be bonded to the metal roof sheets or structures at intervals not more than 30 meters.

All exposed metal frames shall be solidly bonded to the general earthing system.

Air terminals / roof conductors shall be earthed via flexible stranded 70mm<sup>2</sup> vertical down conductors spaced not more than 25metres

Down conductors shall run in 32mm diameter pvc sleeves concealed in walls or columns with lower ends terminated and bonded to earth spikes buried at least 500mm below finished floor level in earth inspection pits / chambers.

Installation of Roof and down conductors shall be complete with appropriate conductor guides installed not exceeding 1.2 meters vertically and 1.5 meters horizontal.

Appropriate accessories such as T. crimp sleeves, crimp lugs, termination clamps, jointing sleeves, thermoweld connections etc. shall be used in the earthing installation.

Carried Forward

E

Section No. 3  
Bill No. 7  
LIGHTNING PROTECTION



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b><u>Site Survey</u></b>			
1	As specified per Engineers specification, before installation work can commence on this section, the contractor must verify the following and write a report; assessment of site soil conditions, resistivity, of the local soil, volume of ground encapsulated by the and overall earth resistance. This work is to be undertaken by a earthing specialist.		SUM
<b><u>Air termination system</u></b>			
2	3x25mm bare copper flat tape	m	48
3	25mm bare copper stranded conductor	m	30
4	Copper covered steel earth arias 1.2m long mounted on the roof per columns and roof sheets	No	7
5	Bond all roof metallic equipment to earth including water gutters, steel column sand	No	1
6	200mmx200mm precast concrete manholes complete with concrete covers.	No	1
<b><u>Down Conductors</u></b>			
7	16mm bare copper earth conductors connected from the air terminations system to wall mounted inspection box. Rate to include conduiting chasing to wall conduit from air termination to inspection box and all accessories.	m	50
8	100mmx100mm earth inspection box wall mounted at 350mm above finished floor level. Rate to include 4x4 fibre glass with sliding door box, adaptors, cable lugs, screws and accessories.	No	5
Carried Forward			E
Section No. 3 Bill No. 7 LIGHTNING PROTECTION			



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b><u>Earth termination Systems</u></b>			
9	16mm bare copper earth conductors connected from inspection box to earth spike/ earth mat.. Rate to include conduiting chasing to wall conduit from inspection box to earth spike and all accessories.	No	65
10	Copper covered steel earth rods class 2, 2.5m long, driven full length into the ground complete with ground buried clamps.	No	7
<b><u>Testing</u></b>			
11	Allow for testing the installation included in the presence of the Engineer. Rate to include providing all testing equipment.		SUM
<b>Carried Forward to Summary of Section No. 3</b>			E
Section No. 3			
Bill No. 7			
LIGHTNING PROTECTION			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 8</u></b>			
	<b><u>ICT NETWORK AND DATA OUTLET INSTALLATION</u></b>			
	<b><u>Supply and Install Data / Telephone points as specified</u></b>			
	<u>Telephone reticulation wireways to be PVC sleeving concealed at appropriate depths in ground or concrete complete with steel draw wires.</u>			
1	Supply and install 24U Patch Panel ICT Data Cabinet with all provision for connection points and accessories.	No	1	
2	Supply and install 24 pots switch 10/1000 gigga bit	No	1	
3	Supply and install 8 pots switch 10/1000 gigga bit	No	1	
4	Supply and install plug box 4x4 york weather proof fibre box with sliding door deep flush wall mounted	No	1	
5	Supply and install data points, complete with 20mm PVC conduits adaptors, couplings, and accessories.	No	35	
6	Supply and install UTP cat ethernet cable	m	1,500	
7	Supply and Install 600x600x600mm deep flush telephone DB	No	1	
8	Supply, connect and Install cabree data isolator conduiting to be complete with 20mm PVC conduit , adaptors, couplings and accessories, 2.5mm wiring and 2.5mm insulated earth wire.	Item		
9	Supply and install medium duty welded mesh cable tray (dimension: width300mm; Hieght 50mm; Length 3000mm)	m	30	
	<b>Carried Forward</b>			
	Section No. 3 Bill No. 8 ICT NETWORK AND DATA OUTLET INSTALLATION		E	

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b>Data Outlets</b>			
10	Telephone socket outlet power skirting mounted flush	No 35	
11	Data socket outlet power skirting mounted flush	No 35	
12	Flush mounted data draw box 100x100mm and galvanised steel draw wire in place.	m 100	
Carried Forward to Summary of Section No. 3			E
Section No. 3			
Bill No. 8			
ICT NETWORK AND DATA OUTLET INSTALLATION			

## PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
<b><u>BILL NO. 9</u></b>				
<b><u>HVAC INSTALLATION</u></b>				
<b><u>Outdoor Units</u></b>				
1	Supply and Install LG brand similar or equal to approved Multi V5 outdoor unit with Heat Recovery combination unit ARUM200LTE5, cooling capacity 56.0KW and heating capacity of 63.0KW 3-415V Input [Outdoor1]	No	2	
2	Supply and install Heat Recovery switch or auto change over switch	No	4	
<b><u>Indoor Units</u></b>				
3	Supply and Install LG brand similar or equal to approved indoor ceiling mounted cassette Inverter Heat Pump Unit.Rate shall include delivery, off-loading and storage to site.			
			Item	
4	2.2kW (6000 Btu)midwall indoor unit.	No	2	
5	2.8kW (9000 Btu)midwall indoor unit	No	6	
6	3.5kW (12000 Btu) Midwall indoor unit	No	3	
7	6.4kW (22000Btu) midwall indoor unit	No	2	
8	Allow for supply and install refrirant pipework, condensate drains including welding copper and all accessories	m	150	
9	Indoor unit to include wall mounted wired remote	No	11	
<b>Carried Forward</b>				<b>E</b>
Section No. 3 Bill No. 9 HVAC INSTALLATION				

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward			E
<b><u>Wiring Trunking</u></b>			
10	Supply and Install 76x60mm pre galvanised steel wiring trunking complete with accessories such as support fixtures, fittings, bends, covers etc, but excluding wiring.	m	90
<b><u>Extracting System</u></b>			
11	Supply and Install wall extractor fan complete shadow grey external grill, on/off control with neon indicator, FR22/30 speed controller, tamper proof positive plug and socket. Rate shall include delivery, off-loading and storage to site.	Item	
12	Wall mounted extractor fan GX9, 41W, 50dB	No	2
<b><u>Electrical Works</u></b>			
13	Supply , connect and install SU3x24way + tray distribution board flush mounted with lockable doors, complete with bars, neutral and earth bars, labels, blank covers, provision for future circuit breakers etc to accommodate the switchgear as shown in the drawing shown.	No	1
<u>Supply , connect and install the following circuit breakers for above Distribution boards.</u>			
14	Main circuit breaker 150A 3 Phase 10kA CBI (black)	No	1
15	125A 3 Phase 10kA CBI (black)	No	2
<u>Supply , install and connect reticulation wire ways and cabling including lugs, trenching, termination and backfilling as follows</u>			
16	35mmx 4-core PVC/SWA/PVC underground cable	m	120
17	25mm earth wire bare copper cable to run with above cable	m	120
Carried Forward			E
Section No. 3 Bill No. 9 HVAC INSTALLATION			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Brought Forward		E	
<b>Testing and Commissioning</b>			
18	Test and commission the complete installation as included in Bill2	Item	
19	Issue a certificate of compliance(CoC) in accordance with the SABS 0173 requirements per installation.	Item	
Carried Forward to Summary of Section No. 3		E	
Section No. 3			
Bill No. 9			
HVAC INSTALLATION			



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 10</u></b>			
	<b><u>SUNDRY ITEMS</u></b>			
	<b><u>Supply and install nurses call equipment as specified:</u></b>			
1	Concrete breaking in walls, floors neatly using angle grinder, making good all chases(all chases to be provided by Engineer). Proper plastering and paintwork using existing colour to be undertaken by your skilled labour. All conduits to be neatly installed(flush mounted) and correctly saddled to the satisfaction of Engineer. Ensure to have all occupants belongings covered up prior to commencement.	Item		
2	Cable trench in hard ground, tar or slab 700mm deep, 300mm wide, 100mm deep across walkways or driveways danger marking tape at 300mm depth complete with protective blackfilling using soft soil and sand and compacting to level with finished ground level.	m	150	
3	Inspection: carrying out all test prescribed by SANS 10142-(2003)as ammended.Insulation resistance test, polarity test, Earth fault loop impedance tests, continuity tests. Handing over in complete working order. Final test to be performed in the Engineer. Test sheets and inspection schedules for each part of the Installation or DB to be handed over complete.  <u>Perform the following test and submit test sheets for all parts of the installation to be handed over on completion. Final test to be carried in the presence of Engineer.</u>	Item		
4	Insulation resistance test	Item		
5	Earth loop impedance	Item		
6	Continuity test	Item		
	<b>Carried Forward</b>		E	
	Section No. 3 Bill No. 10 SUNDRY ITEMS			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

		Brought Forward			E
7	Visual Inspection		Item		



PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Item No		Quantity	Rate	Amount
	<b><u>BILL NO.11</u></b>			
	<b><u>PROVISIONAL SUMS</u></b>			
	<b><u>EEC Connection</u></b>			
1	Allow a provisional sum of <b>Thirty Thousand emalangeni</b> for EEC connection fee with completing all formalities, issuing al notices and paying all fees due to in respect of the installation to the supply authority to the latest edition of SABS 0142 as amended. clamps, T. clamp sleeves, crimp lugs etc not included in this bill		SUM	
2	Allow 10% profit attendance for the above EEC connection		SUM	
	<b><u>EPTC &amp; PABX System</u></b>			
3	Allow a provisional sum of Sixty Thousand <b>Emalangeni</b> for the supply, delivery, storage, installation, testing and commissining of a PABX system and EPTC by a specialist contractor as chosen by the Electrical Engineer. Specialist to make all telephone connections to telephone points from PABX.	Item		60,000.00
4	Allow 10% profit attendance for the above EEC connection	Item		6,000.00
	<b><u>Projector Installation</u></b>			
5	Supply and install Projector Point, complete with wiring conduits, adaptors, couplings, isolators, and accessories, insulated earth wire and switch socket with white cover plate, 1.5mm wiring and 1.5mm insulated earth wire.	No	1	
6	Supply and install 30A Crabtree flush mounted projector Isolator	No	1	
	<b>Carried Forward</b>		E	
	Section No. 3 Bill No. 11 PROVISIONAL AMOUNTS			

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

	Brought Forward			E	
7	Supply and install Acer PROJ P1286, maximum resolution (920x1200) digital overhead projector with ceiling mount brackets ( Automated smart lift), electric projector screen 100" to make all connections from floor box to projector and screen.	No	1		
8	Supply and install 2mx2m manual pull down screen. Rate to include all mounting accessories.	No	1		
Carried Forward to Summary of Section No. 3				E	
Section No. 3					
Bill No. 11					
PROVISIONAL AMOUNTS					

PROPOSED MPAKA ICD FOR ESWATINI RAILWAYS

Bill No	SECTION SUMMARY - Section No.3-Electrical Installation	Page No	Amount	
1	PRELIMINARIES AND GENERALS	39		
2	DISTRIBUTION BOARDS	40		
3	POWER RETICULATION AND KIOSK INSTALLATION	42		
4	LIGHTING OUTLETS INSTALLATION	44		
5	POWER OUTLETS INSTALLATION	46		
6	FIRE DETECTION INSTALLATION	47		
7	LIGHTNING PROTECTION	50		
8	ICT NETWORK AND DATA OUTLET INSTALLATION	52		
9	HVAC INSTALLATION	55		
10	SUNDRY ITEMS	57		
11	PROVISIONAL AMOUNTS	59		
Carried to Final Summary			E	
Section No. 3				



### 10.3. SECTION C: Guard House

ITEM No.	PAYMENT REF.	Description	Unit	QTY	Rate (E)	Amount (E)
C1		Lumpsum provision for Turnkey project: erecting Guardhouse structure to completion as per supplied Drawing – Annex 2	Sum	1		
		<b>Carried forward to Summary</b>				

#### 10.4. SECTION D: Weighbridge Control Room

PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0

[illegible]

**PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0**

Item No		Quantity	Rate	Amount
	<b>SECTION NO. 2</b>			
	<b>BILL NO. 1</b>			
	<b>EARTHWORKS</b>			
	<b>SITE CLEARANCE, ETC</b>			
1	Allow for clearing the area of the site to be built upon of all grass, weeds, shrubs, trees with trunks not exceeding 200mm girth, debris, etc., including grubbing up all roots, scoffling up as required and cart away all vegetation and debris	m2	34	
2	Strip average 200mm thick layer of topsoil and stockpile on site	m2	34	
	<b>EXCAVATION OTHER THAN BULK</b>			
	<u>Excavation in earth not exceeding 2m deep:</u>			
3	Trenches	m3	8	
	<u>Extra over bulk excavation in earth for excavation in:</u>			
4	Soft rock	m3	1	
5	Hard rock	m3	1	
	<u>Risk of collapse of excavations other than bulk:</u>			
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	22	
	<b>CARTING AWAY</b>			
	<u>Extra over all excavations for loading, carting and dumping surplus excavated material (no allowance made for increase in bulk):</u>			
7	Off site to a dumping site to be found by the Contractor	m3	4	
	<b>EARTH FILLING, ETC.</b>			
	<u>Filling with material from the excavations compacted to a density of at least 95% Mod. AASHTO maximum density:</u>			
8	Backfilling to trenches, holes, etc.	m3	4	
	<b>Carried Forward</b>		E	
	Section No. 2			
	Bill No. 1			
	EARTHWORKS			



**PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0**

<b>Brought Forward</b>			E	
<u>Filling with G5 gravel material supplied and carted onto site by the Contractor, compacted to a density of at least 95% Mod. AASHTO maximum density:</u>				
9	Under floors, pavings, etc.	m3	2	
<u>Filling with insitu material ripped and recompacted material from excavation by the Contractor, compacted to a density of at least 93% Mod. AASHTO maximum density:</u>				
10	Rip, scarify as necessary and compact natural ground and/or excavated surfaces to a density of at least 95% of Mod. AASHTO maximum density for a depth of 150mm under roadways	m2	8	
<u>Coarse river sand filling compacted to 95% Mod. AASHTO maximum density:</u>				
11	Blinding layer under surface beds	m3	0.4	
<b><u>KEEPING EXCAVATIONS FREE OF WATER</u></b>				
12	Allow for keeping excavations free of water (other than subterranean water) by hand or machinery		Item	
<b><u>TESTS</u></b>				
<u>Prescribed density tests on filling:</u>				
13	"Modified AASHTO Density" test	No	6	
<b><u>SOIL POISONING</u></b>				
<u>Approved brand of anti-termite soil poison applied by a Registered Pest Control company and guaranteed against termite infestation for ten years:</u>				
14	Under floors, etc., including forming and poisoning shallow furrows against foundation walls, etc., filling in furrows and ramming	m2	8	
15	To bottoms and sides of trenches, etc	m2	30	
<b>Carried Forward to Summary of Section No. 2</b>			E	
Section No. 2				
Bill No. 1				
EARTHWORKS				



Item No		Quantity	Rate	Amount
	<b>BILL NO. 2</b>			
	<b>CONCRETE, FORMWORK &amp; REINFORCEMENT</b>			
	<b>UNREINFORCED CONCRETE</b>			
	Concrete 10 MPa/10mm stone in:			
1	Blinding under footings	m3	0.4	
2	Filling to hollow walls in foundations	m3	2	
	<b>REINFORCED CONCRETE</b>			
	Concrete 30 MPa/19mm stone in:			
3	Surface beds and thickenings	m3	1	
4	Wall footings	m3	2	
5	Wall beams	m3	1	
6	External pavings/Apron	m3	1	
7	Steps	m3	0.5	
	<b>FINISH TOP OF CONCRETE</b>			
	Finish top of concrete smooth with a wood float:			
8	Pavings, surface beds, slabs, etc to falls	m2	18	
	<b>CONCRETE TESTING</b>			
9	Allow for making set of three concrete test cubes, sending to an approved testing authority for testing and paying all charges in connection therewith (Provisional)	No	12	
	<b>SMOOTH FORMWORK</b>			
	Rough formwork to:			
10	Sides of wall beams	m2	7	
	<b>MOVEMENT JOINTS, ETC.</b>			
	<b>Carried Forward</b>		E	
	Section No. 2			
	Bill No. 2			
	CONCRETE, FORMWORK AND REINFORCEMENT			



Brought Forward			E
<u>Expansion joints with 10mm "Sondor Jointex" closed cell expanded polyethylene preformed joint filler and hinged blocking piece:</u>			
11	Joints not exceeding 300mm high or wide between concrete and brick or block walls	m	10
<b><u>REINFORCEMENT</u></b>			
<u>Fabric reinforcement:</u>			
12	Type 193 fabric reinforcement in concrete surface beds, slabs, etc,	m2	8
13	Type 395 fabric reinforcement in foundations	m2	8
<u>Mild steel reinforcement to structural concrete work:</u>			
14	Bars of various diameters	t	0.04
<u>High yield stress steel reinforcement to structural concrete work:</u>			
15	Bars of various diameters	t	0.02
<b>Carried Forward to Summary of Section No. 2</b>			E
Section No. 2			
Bill No. 2			
CONCRETE, FORMWORK AND REINFORCEMENT			

Item No	Quantity	Rate	Amount
<b>BILL NO. 3</b>			
<b>MASONRY</b>			
<b>BLOCKWORK IN FOUNDATIONS</b>			
<u>Blockwork in concrete blocks of 7Mpa compressive strength in Class I mortar filled solid with concrete (elsewhere measured)</u>			
1	230mm Thick walls with cavities filled solid with concrete (elsewhere measured) in foundations	m2	8
<b>BLOCKWORK IN SUPERSTRUCTURE</b>			
<u>Blockwork in concrete blocks of 7Mpa compressive strength in Class I mortar:</u>			
2	230mm Thick walls	m2	34
<b>BLOCKWORK SUNDRIES</b>			
<u>Blockwork reinforcement:</u>			
3	155mm Wide reinforcement built in horizontally	m	97
<b>FIBRE-CEMENT CILLS</b>			
<u>Natural grey cills in single lengths bedded in Class I mortar including metal fixing lugs, etc:</u>			
4	15 x 150mm Wide cills set flat and projecting	m	4
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 3			
MASONRY			

Item No		Quantity	Rate	Amount
<b><u>BILL NO. 4</u></b>				
<b><u>WATERPROOFING</u></b>				
<b><u>DAMPPROOFING OF WALLS AND FLOORS</u></b>				
<u>One layer 375 micrometre "Gunplas Brikgrip" embossed polyethylene damp proof course:</u>				
1	In walls	m2	3	
<u>One layer 250 micrometre "Gunplas USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape":</u>				
2	Under surface beds	m2	8	
Carried Forward to Summary of Section No. 2				E
Section No. 2				
Bill No. 4				
WATERPROOFING				

Item No	Quantity	Rate	Amount
<b>BILL NO. 5</b>			
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bill of Quantities.			
<b>ROOF COVERINGS, ETC</b>			
<b>PROFILED METAL SHEETING AND ACCESSORIES</b>			
0.5mm Thick "I.B.R." galvanised (600g/m2) sheet steel roofing fixed to treated timber purlins (elsewhere measured):			
1	Roof covering with pitch not exceeding 25 degrees	m2	9
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 5			
ROOF COVERINGS			

Item No		Quantity	Rate	Amount
	<b>BILL NO. 6</b>			
	<b>CARPENTRY AND JOINERY</b>			
	The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
	<b>ROOF CONSTRUCTION</b>			
	<b>PLATE NAILED TIMBER ROOF TRUSSES, ETC</b>			
	<u>Plate nailed timber roof truss construction:</u>			
	The following is applicable in respect of roof construction: Rafters are at maximum 900mm centres. Roof covering is IBR roof sheeting at a pitch of not exceeding 25 degrees on purlins. Ceilings are 6mm nutec fibre cement sheeting on 38 x 38mm brandering. The roof construction is to be in strict accordance with the roof plan as detailed on the Architect's drawings number SR/H/264 accompanying these Bills of Quantities for tender purposes. The design of the roof structure is to be to the complete satisfaction of the Architect. Actual measurements are to be obtained from the Architect and/or the site before final design or fabrication commences			
	<u>Sawn softwood:</u>			
1	38 x 114mm rafters	m	11	
2	50 x 76mm purlins	m	10	
	<b>SKIRTINGS</b>			
	<u>Wrot meranti:</u>			
3	19 x 76mm Skirting including 19mm quadrant bead	m	9	
	<b>EAVES, VERGES, ETC</b>			
	<u>"Everite" pressed nutec-cement:</u>			
4	15 x 225mm Fascias and bargeboards including galvanised steel H-profile jointing strips	m	11	
	<b>Carried Forward</b>		E	
	Section No. 2 Bill No. 6 CARPENTRY AND JOINERY			

Brought Forward		E
<b>EXTERIOR QUALITY FRAMED DOORS, ETC</b>		
<u>Wrot meranti doors hung to steel frames:</u>		
5	40mm Framed solid meranti single door 813 x 2032mm high divided into ten panels and formed of 106mm stiles, top and middle rail and 220mm bottom rail	No 1
<p style="text-align: right;"><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2 Bill No. 6 CARPENTRY AND JOINERY</p>		E



Item No	Quantity	Rate	Amount
<b>BILL NO. 7</b>			
<b>CEILINGS AND PARTITIONS</b>			
The tenderer is referred to the relevant Clauses in the separate document Model Preamble for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities			
<b>NAILED UP CEILINGS</b>			
<u>6mm "Everite" fibre-cement (or "Everite Nutec-cement") boards with H-profile coated steel jointing strips:</u>			
1	Ceilings on and including 38 x 38mm sawn softwood branderling at 600mm centres and at all perimeter edges	m2	5
2	Extra over ceiling for 600 x 600mm trap door formed of 38 x 50 mm wrot softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	1
<u>"Masonite" cornices:</u>			
3	75mm Coved cornices	m	9
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 7			
CEILINGS, PARTITIONS AND ACCESS FLOORING			

Item No		Quantity	Rate	Amount
<b><u>BILL NO. 8</u></b>				
<b><u>IRONMONGERY</u></b>				
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities				
<b><u>"EN-SUITE" LOCKS</u></b>				
1	Three lever mortice lockset as "Union Radius CZ 692 - 24CH 2252 - 76SC"	No	1	
<b><u>LETTERS, NAMEPLATES, ETC.</u></b>				
2	100 x 50 x 5mm Thick clear perspex plate with red background and three white 20mm high reverse engraved and painted letters or numerals	No	1	
<b><u>SUNDRIES</u></b>				
3	Door stop plugged as "Union AL 8730"	No	1	
4	Chromium plated hat and coat hook	No	1	
Carried Forward to Summary of Section No. 2				E
Section No. 2				
Bill No. 8				
IRONMONGERY				



Item No	Quantity	Rate	Amount
<b>BILL NO. 9</b>			
<b>METALWORK</b>			
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities			
<b>PRESSED STEEL DOOR FRAMES</b>			
<u>1,2mm Double rebated frames suitable for one block walls:</u>			
1	Frame for door 813 x 2032mm high	No	1
<b>STEEL WINDOWS.</b>			
<u>Wispeco standard steel framed, Industrial type windows:</u>			
2	Type Corner Window size 4440 x 1053mm high	No	1
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 9			
METALWORK			

Item No	Quantity	Rate	Amount
<b>BILL NO. 10</b>			
<b>PLASTERING</b>			
The Tenderer is referred to the relevant clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the front of these Bills of Quantities			
<b>SCREEDS</b>			
Screeds (1:3) as described on concrete:			
1	25mm Thick on floors and landings	m2	8
<b>INTERNAL PLASTER</b>			
One coat cement plaster (1:5) as described on blockwork on:			
2	Walls	m2	28
3	Narrow widths	m2	3
<b>EXTERNAL PLASTER</b>			
One coat cement plaster (1:4) as described on blockwork on:			
4	Walls	m2	34
5	Narrow widths	m2	3
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 10			
PLASTERING			

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Item No		Quantity	Rate	Amount
	<b>BILL NO. 12</b>			
	<b>PLUMBING AND DRAINAGE</b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
	<b>RAINWATER DISPOSAL</b>			
	UPVC rainwater goods:			
1	125mm Diameter half round eaves gutter fixed to falls on and including upvc brackets spaced at 1000mm centres and screwed to fibre-cement fascia	m	3	
	Extra on Upvc gutters for the following fittings:			
2	Stopped end	No	2	
3	Angle	No	2	
4	Outlet with nozzle piece for and joint to 75mm UPVC rainwater pipe	No	2	
	(End of Extras)			
5	75mm Pipe fixed to wall with upvc holderbats	m	6	
	Extra on UPVC piping for the following fittings:			
6	75mm Bend	No	2	
7	75mm Shoe	No	2	
8	75mm Swanneck 600mm projection	No	2	
	<b>FIRE APPLIANCES, ETC</b>			
	"Chubb":			
9	4,5kg Ozone friendly carbon dioxide fire extinguisher	No	1	
	<b>Carried Forward to Summary of Section No. 2</b>		E	
	Section No. 2			
	Bill No. 12			
	PLUMBING AND DRAINAGE			

Item No	Quantity	Rate	Amount
<b>BILL NO. 13</b>			
<b>GLAZING</b>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities			
<b>OBSCURE GLASS</b>			
<u>4mm Pacific obscure glass and glazing to:</u>			
1	Steel sashes in panes exceeding 0.5m2 not exceeding 2m2 m2	5	
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 13			
GLAZING			

**PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0**

Item No		Quantity	Rate	Amount
	<b>BILL NO. 14</b>			
	<b>PAINTWORK</b>			
	<b>PAINT ON PLASTER, ETC</b>			
	<u>One coat plaster primer and two finishing coats "Dulux" acrylic PVA paint on:</u>			
1	Plastered walls internally	m2	31	
	<u>One coat plaster primer and two finishing coats "Dulux" acrylic PVA paint on:</u>			
2	Plastered walls externally	m2	37	
	<u>One coat plaster primer and two finishing coats "Dulux" acrylic PVA paint on:</u>			
3	Fibre-cement fascias and barge boards	m2	3	
	<u>One coat acrylic fillercoat and two finishing coats interior quality pure acrylic paint on:</u>			
4	6mm "Everite" fibre-cement ceilings with taped and skimmed joints	m2	5	
5	75mm Coved "Rhino" gypsum plasterboard cornices	m	9	
	<b>PAINT ON METAL</b>			
	<u>Touch up manufacturer's priming coat with "Dulux" primer for steel and apply one coat undercoat and one coat "Dulux" gloss enamel on:</u>			
6	Door frames and linings	m2	3	
7	Window frames	m2	5	
	<b>PAINT ON WOOD</b>			
	<u>One coat undercoat and two coats gloss enamel on:</u>			
8	Cills not exceeding 300mm girth	m	4	
	<b>Carried Forward</b>		E	
	Section No. 2			
	Bill No. 14			
	PAINTWORK			



PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0

Brought Forward			E
<u>One coat pink primer and two coats "Dulux" gloss enamel on:</u>			
9	General surfaces	m2	3
10	Skirting and quadrant bead not exceeding 300mm girth	m	9
Carried Forward to Summary of Section No. 2			E
Section No. 2			
Bill No. 14			
PAINTWORK			



**PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0**

Item No	Quantity	Rate	Amount
<b>SECTION NO. 15</b>			
<b>BILL NO. 17</b>			
<b>PROVISIONAL AMOUNTS, ETC</b>			
The Tenderer is referred to the relevant Clauses in the separate document Model Preambles and to the Supplementary Preambles which are incorporated at the back of these Bills of Quantities.			
<b>PROVISIONAL AMOUNTS</b>			
The following Provisional Sums are for work to be executed by Sub-Contractors. The sums stated are NETT			
<u>Electrical Installation:</u>			
1	Allow the NETT provisional sum of E 3 500.00 (Three Thousand Five Hundred Emalangeni only) for the electrical installation	Item	3 500 00
2	Add for profit on last item if required	Item	
3	Allow for attendance upon workmen executing electrical installation complete	Item	
<u>Saligna Worktop:</u>			
4	Allow the NET provisional amount of E 5 000.00 (Five Thousand Emalangeni only) for saligna worktop executed complete.	Item	5 000 00
5	Add for profit on last item if required.	Item	
6	Allow for attendance upon workmen executing joinery fittings complete.	Item	
<b>Carried Forward to Summary of Section No. 2</b>			E
Section No. 2			
Bill No. 15			
PROVISIONAL AMOUNTS			





PROPOSED CONTROL ROOM BUILDING  
FOR SWAZILAND RAILWAY  
SW1702-0

SECTION SUMMARY - Control Room			
Bill No		Page No	Amount
1	EARTHWORKS	-3-	
2	CONCRETE, FORMWORK AND REINFORCEMENT	-5-	
3	MASONRY	-6-	
4	WATERPROOFING	-7-	
5	ROOF COVERINGS	-8-	
6	CARPENTRY AND JOINERY	-10-	
7	CEILINGS, PARTITIONS AND ACCESS FLOORING	-11-	
8	IRONMONGERY	-12-	
9	METALWORK	-13-	
10	PLASTERING	-14-	
11	TILING	-15-	
12	PLUMBING AND DRAINAGE	-16-	
13	GLAZING	-17-	
14	PAINTWORK	-19-	
15	PROVISIONAL AMOUNTS	-20-	
Section No. 2			
Carried to Final Summary			
			E



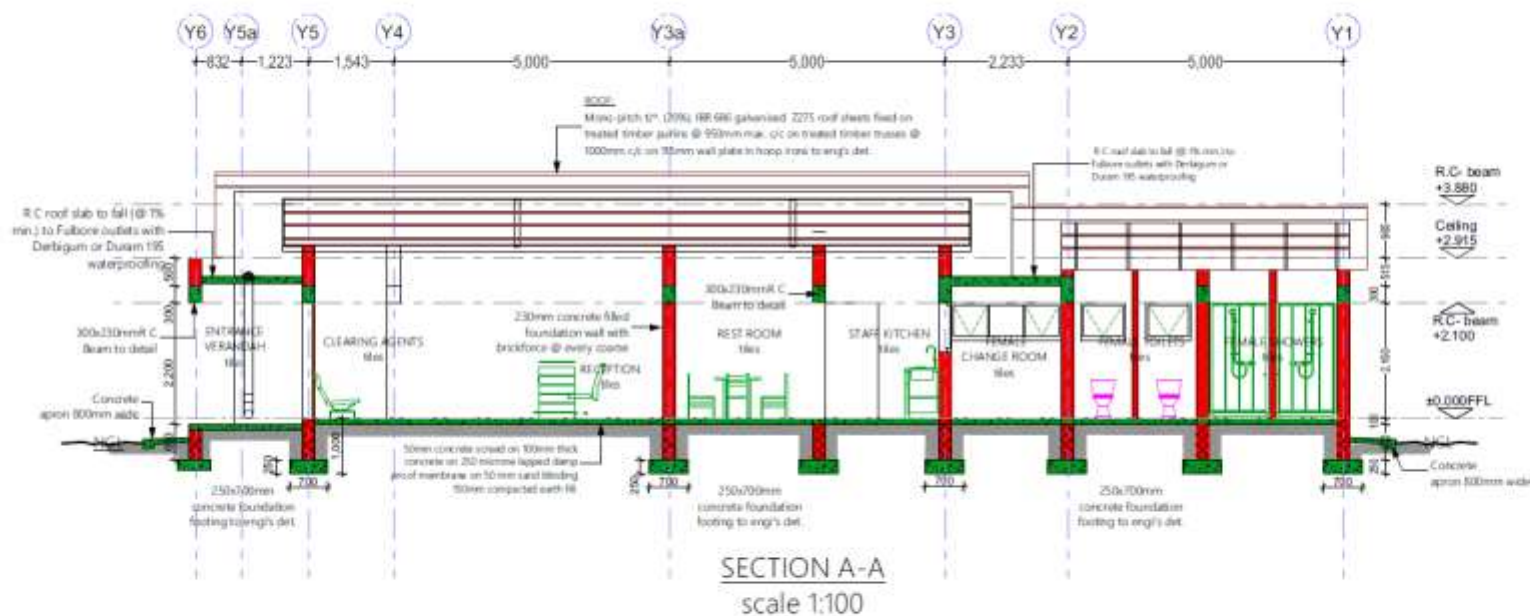
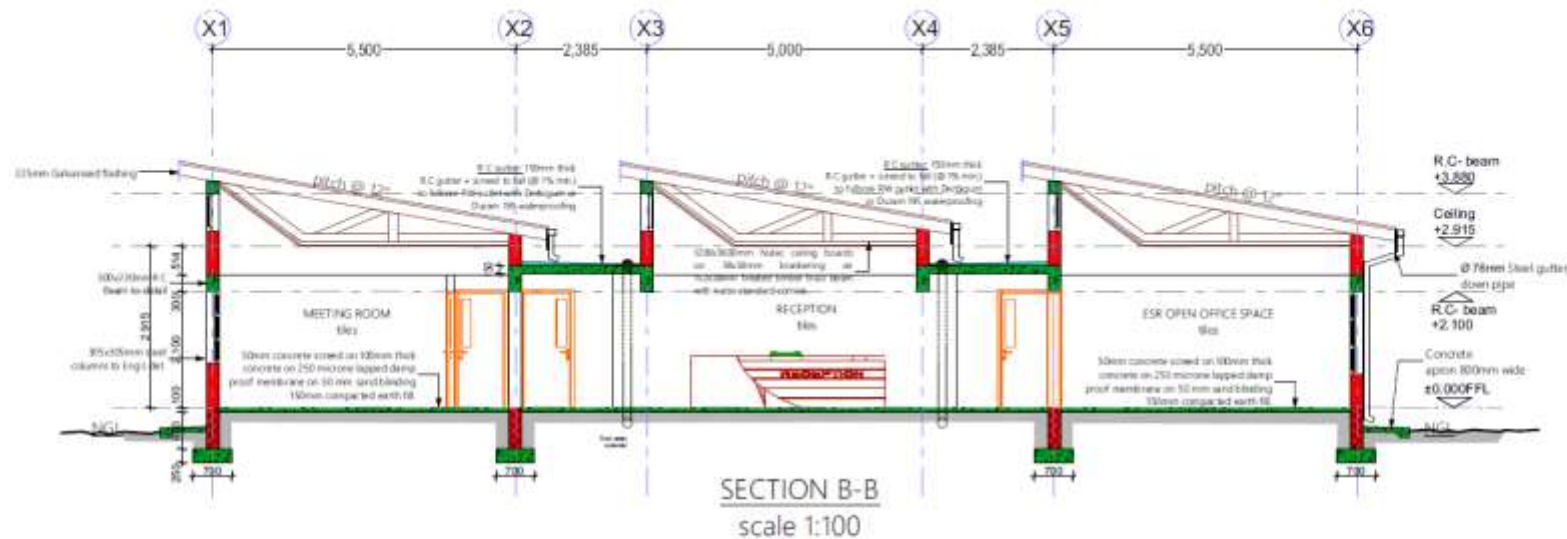
## 10. TENDER DRAWINGS

### 12.1. List of Specific Drawings

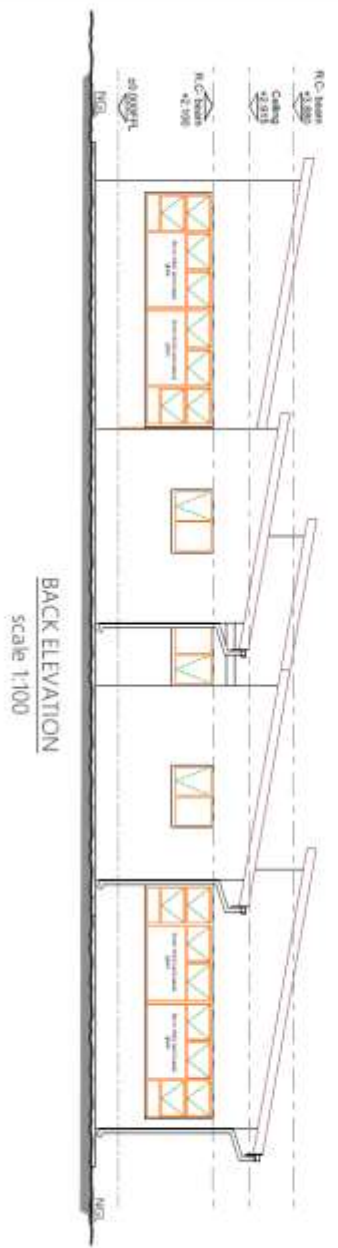
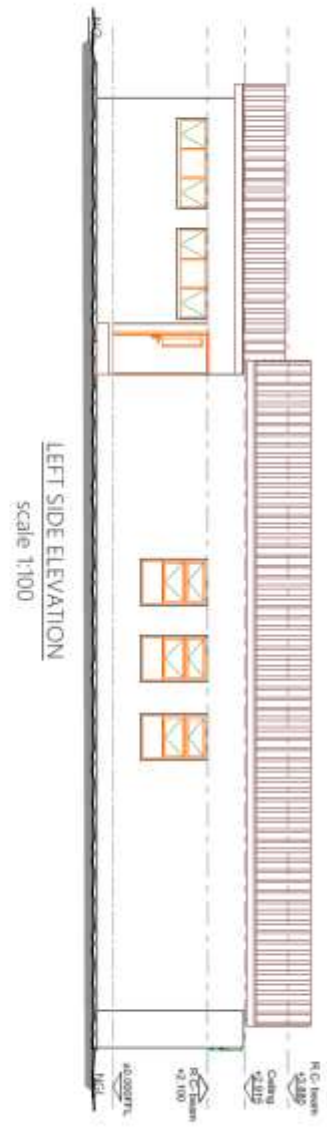
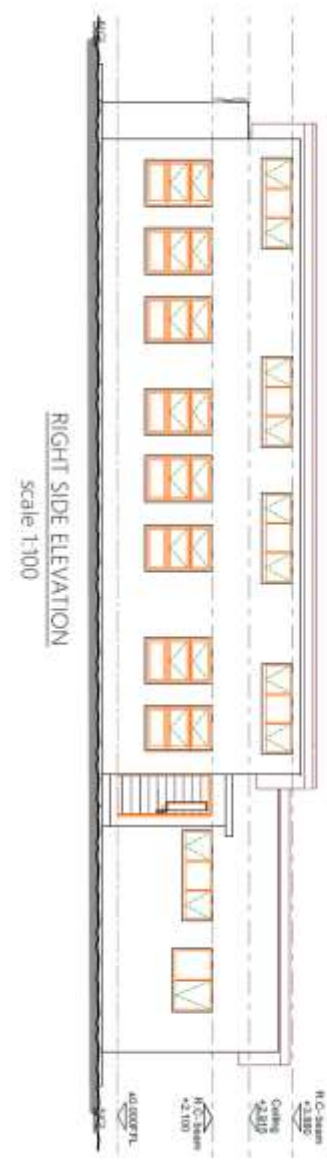
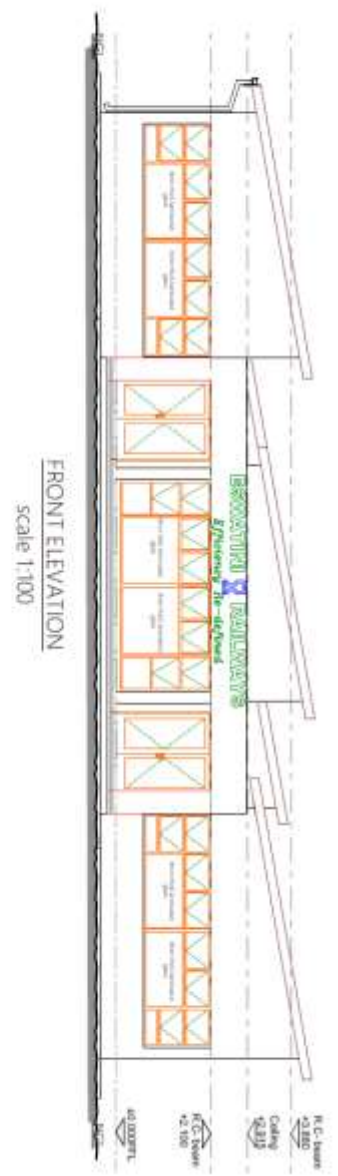
Annex	Description
1	Mpaka ICD Office: DWG No. SR/F/58 - Elevations; DWG No. SR/F/58 – FLOOR PLAN LAYOUT, ELECTRICAL LAYOUT, SEWER LAYOUT, WINDOW AND DOOR SCHEDULE; DWG No. SR/F/58 - Sections
2	Guardhouse - DWG No. SR/F/58 (FLOOR PLAN LAYOUT, SECTION, ELEVATIONS, WINDOW & DOOR SCHEDULE)
3	Weighbridge Control Room: - SR/H/264 (Proposed Control Room Ver.01)

Annex 1: Mpaka ICD main Office building Layout and sections



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## Annex 2: Guardhouse

