

# **Mauritius Museums Council**

Mauritius Institute Building, Chaussée Street, Port Louis Tel: 211 7794/ 212 5717 Fax: 210 1272

# Open National Bidding for Works

# Refurbishment of Sir Seewoosagur Ramgoolam Memorial Centre for Culture at Plaine Verte, Port Louis

Procurement Reference No: MMC/OAB/01 of 2021-22

#### Section I: Instruction to Bidders

#### 1. Introduction

The Mauritius Museums Council also referred as the Employer, invites eligible local contractors to submit their bid for the works described in detail hereunder. Any resulting contract shall be subject to the terms and conditions referred to in this document.

The Works are Refurbishment of Sir Seewoosagur Ramgoolam Memorial Centre for Culture at Plaine Verte, Port Louis.

Participation is limited to citizens of Mauritius or entities incorporated in Mauritius. Joint Ventures should be among entities incorporated in Mauritius

1.1 Clarifications, if any, should be addressed to **Director**, **Mr.D. Ramracheya**, **Mauritius Museums** Council, **Mauritius Institute Building**, **Chaussée St**, **Port Louis**.

The Employer will respond in writing to any request for clarification, provided that such request is received 14 days prior to the deadline for submission of bids.

The Employer shall respond to such request at latest 7 days prior to the deadline set for submission of bids.

1.2 Bidders are advised to carefully read the complete Bidding document, including the Particular Conditions of Contract in Section IV, before preparing their bids. The standard forms in this document may be retyped for completion but the Bidder is responsible for their accurate reproduction.

#### 2. Validity of Bids

The bid validity period shall be 90 days from the date of bid submission deadline.

#### 3. Works Completion Period

The Intended Completion period is 180 days from start date of works.

#### 4. Site Visit

Bidders or their designated representatives are invited to attend a pre-bid meeting on Monday 11<sup>th</sup> April 2022 @ 10 00 hrs at Sir Seewoosagur Ramgoolam Memorial Centre for Culture, Plaine Verte, Port Louis. The purpose of the pre-bid meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

#### 5. Sealing and Marking of Bids

Bids should be sealed in a single envelope, clearly marked with the Procurement Reference Number, addressed to the Mauritius Museums Council with the Bidder's name at the back of the envelope.

#### 6. Submission of Bids

Bids should be deposited in the Bid Box located at Mauritius Museums Council, Mauritius Institute Building, Chaussée St, Port Louis not later than Thursday 28<sup>th</sup> April 2022 @ 13 00 hrs. Bids by post or hand delivered should reach the abovementioned address by the same date and time at latest. Late bids will be rejected. Bids received by e-mail will not be considered.

#### 7. Bid Opening

Bids will be opened by the "Mauritius Museum Council" at Mauritius Museums Council, Mauritius Institute Building, Chaussée St, Port Louis on Thursday 28<sup>th</sup> April 2022, immediately after closing time. Bidders or their representatives may attend the Bid Opening if they choose to do so.

#### 8. Evaluation of Bids

The Mauritius Museums Council shall have the right to request for clarification during evaluation. Offers that are substantially responsive shall be compared on the basis of evaluated cost to determine the lowest evaluated bid.

#### 9. Eligibility Criteria

To be eligible to participate in this bidding exercise, Bidder should:

- (a) have the legal capacity to enter into a contract to execute the works;
- (b) be duly registered with the CIDB under the grade that would allow him to perform the value of works for which he is submitting his bid. Proposed sub-contractors should be duly registered with the CIDB under the grade that would allow him perform the value of works exceeding Rs1M.
- (c) not be insolvent, in receivership, bankrupt, subject to legal proceedings for any of these circumstances or in the process of being wound up;
- (d) not have had your business activities suspended;
- (e) not be under a declaration of ineligibility by the Government of Mauritius in accordance with applicable laws at the date of the deadline for bid submission or appearing on the ineligibility lists of African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and World Bank Group;
- (f) not have a conflict of interest in relation to this procurement requirement; and
- (g) have a Business Registration Card.

#### 10. Qualification and Experience Criteria

Bidders should have the following minimum qualifications and experience:

- (a) valid registration certificate with the CIDB under the grade that will enable the contractor to perform the works quoted for, under the following class(es): **Building Construction**
- (b) experience in **two works of a similar nature over the last 10 years**, each of value not less than *Rs5M*; The bidder has to submit proof of experience of similar nature ( in form of certificate of completion from Project Manager/Consultant. The Bidder has to detail the scope of works undertaken for the mentioned project.

- (c) **Contract Manager** having as minimum qualification: A diploma in Building and Civil Engineering and 5 years' experience in the construction sector; or any equivalent qualifications acceptable to the Mauritius Museums Council. The bidder has to submit a detailed recently signed CV (of at most 1 month from the date for submission of bid) and a declaration of immediate availability in case the proposed personnel is being outsourced.
- (d) At least one experienced electrician holding the National Trade Certificate (NTC) in electrical installation works (Modules 1,2,3) issued by the Mauritius Examinations Syndicate and the IVTB. The bidder has to submit a detailed recently signed CV (of at most 1 month from the date for submission of bid) and a declaration of immediate availability in case the proposed personnel is being outsourced.
- (e) minimum amount of liquid assets and/or credit facilities net of other contractual commitments of the Bidder of **MUR One Million**.

#### 11. Contents of bid

The Bid shall comprise the following:

- (a) duly filled Bid Submission Form;
- (b) duly filled Priced Bill of Quantities
- (c) duly filled Qualification Information Form and attachments required
- (d) report on the financial standing of the Bidder for the last three years, such as certified copies of Financial Statements or Audited Accounts as filed at the Registrar of Companies before the deadline set for submission of bids
  - (e) Valid Registration certificate with the CIDB, as applicable
  - (f) Signed C.V of Contract Manager, letter of immediate availability
  - (g) Documentary evidence of liquid assets and/or credit facilities (Note 1);
  - (h) Any other documents deemed necessary as per the requirements of this bidding document- such as Filled-in Schedule of Materials for Electrical Specifications

#### Note 1

Bidders to demonstrate access to, or availability of, financial resources such as liquid assets, lines of credit, and other financial means, other than any contractual advance payments to meet the overall cash flow requirements for the contract and its current commitments. Documentary evidence may comprise but not limited to Bank certificate, Certificate from Auditors, Certificate from a Professional Accountant registered with MIPA, Certificate from Insurance companies.

#### 12. Joint Venture

Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:

- i. the Bid shall include all the information required as per the Qualification Information form for each joint venture partner;
- ii. the Bid shall be signed so as to be legally binding on all partners;
- iii. the Bid shall include a copy of the agreement entered into by the joint venture partners defining the division of assignments to each partner and establishing that all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; **alternatively**, a Letter of Intent to execute a joint venture agreement in the event of a successful bid shall be signed by all

partners and submitted with the bid, together with a copy of the proposed agreement;

- iv. one of the partners shall be nominated as being in charge, authorized to incur liabilities, and receive instructions for and on behalf of any and all partners of the joint venture; and
- v. the execution of the entire Contract, including payment, shall be done exclusively with the partner in charge.

#### 13. Prices and Currency of Payment

Bidders should quote for the whole works. Prices for the execution of works shall be quoted and fixed in Mauritian Rupees. Items for which no rate or price is entered by Bidders, shall not be paid for by the Mauritius Museums Council when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.

Bids shall cover all costs of labour, materials, equipment, overheads, profits and all associated costs for performing the works, and shall include all duties. The whole cost of performing the works shall be included in the items stated, and the cost of any incidental works shall be deemed to be included in the prices quoted. Bidders are required to submit their bid prices **exclusive of VAT**.

#### 14. Bid Securing Declaration

Bidders are required to subscribe to a Bid Securing Declaration in the Bid Submission Form.

#### 15. Margin of Preference

Margin of Preference shall not apply.

#### 16. Award of Contract

The Bidder having submitted the lowest evaluated responsive bid and qualified to perform the works shall be selected for award of contract. Award of contract shall be by issue of a Letter of Acceptance in accordance with terms and conditions contained in Section IV: General Conditions of Contract and Particular Conditions of Contract.

#### 17. Performance Security and signing of contract

Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall furnish a Performance Security, in the amount equal to 10% of the Bid price (exclusive of VAT), in accordance with the conditions of contract, using for that purpose the Performance Security Form included in Section V Contract Forms.

The contract agreement shall be signed within 28 days after the successful bidder receives the letter of acceptance unless the parties agree otherwise.

Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the contract within the required time may constitute sufficient grounds for the annulment of the award.

#### 18. Notification of Award and Debriefing

Prior to the expiration of the period of bid validity, the Employer shall, for contract amount above Rs 15 million, notify the selected bidder of the proposed award and accordingly notify unsuccessful bidders. Subject to Challenge and Appeal, the Employer shall notify

the selected Bidder, in writing, by a Letter of Acceptance for award of contract. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

The Mauritius Museums Council shall after award of contract, exceeding Rs 1 million and up to Rs 15 million, promptly inform all unsuccessful bidders in writing of the name and address of the successful bidder and the contract amount.

Furthermore, the Mauritius Museum Council shall attend to all requests for debriefing for contract exceeding Rs 1 million, made in writing within 30 days the unsuccessful bidders are informed of the award.

#### 19. Advance Payment

The Mauritius Museums Council shall provide an Advance Payment on the Contract Price as stipulated in the General Conditions of Contract. The Advance Payment shall be guaranteed by an Advance Payment Security as per the format contained in Section V. The Advance Payment shall be limited to 10% percent of the Contract Price, less any provisional and contingencies sums.

#### 20. Integrity Clause

The Mauritius Museums Council commits itself to take all measures necessary to prevent corruption and ensures that none of its staff, personally or through his/her close relatives or through a third party, will in connection with the bid for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

#### 21. Rights of Mauritius Museums Council

The Mauritius Museums Council reserves the right to accept or reject any bid or to cancel the bidding process and reject all bids at any time prior to contract award without incurring any liability to the Mauritius Museums Council

#### 22. Challenge and Appeal

Unsatisfied bidders shall follow procedures prescribed in Regulations 48, 49 and 50 of the Public Procurement Regulations 2008 to challenge procurement proceedings and award of procurement contracts or to file application for review at the Independent Review Panel.

(a) The address, Tel. & Fax No... & Email address to file Challenges in respect of this procurement is:

Director of the Mauritius Museums Council,

Telephone: <u>210 0535</u> Facsimile: <u>210 1272</u>

# (b) The address to file Application for Review is:

The Chairperson
Independent Review Panel,
5<sup>th</sup> Floor,
Belmont House
Intendence Street
Port Louis

Tel: +230 2602228

Emal: irp@govmu.org

# **Section II: Bidding Forms**

Note: Bidders are required to fill all the forms in this section and submit as part of their bid. Non-submission of any form may lead to rejection of the bid

#### **Bid Submission Form**

	Date:
	Bid's Reference No.:
	Procurement Reference No:
To:	
We, t	the undersigned, declare that:
(a)	We have examined and have no reservations to the Bidding Documents, including Addenda issued;
(b)	We offer to execute in conformity with the Bidding Documents the following Works:
(c)	The total price of our Bid excluding VAT is:(MUR):
(d)	Our bid shall be valid for a period of <b>90 days</b> from the date fixed for the bid submission deadline in accordance with the Bidding Documents and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
(e)	We hereby confirm that we have read and understood the content of the Bid Securing Declaration attached hereto and subscribe fully to the terms and conditions contained therein, if required. We understand that non-compliance to the conditions mentioned may lead to disqualification.
(f)	If our bid is accepted, we commit to obtain a Performance Security in accordance with the Bidding Document;
(g)	We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 8;
(h)	We are not participating, as a Bidder in more than one bid in this bidding process;
(i)	Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible under the laws of Mauritius;
(j)	We have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption as per the principles described hereunder, during the

We shall not, directly or through any other person or firm, offer, promise or give to any of the Mauritius Museums Council's employees involved in the bidding process or the execution of the contract or to any third person any material or immaterial

bidding process and contract execution:

benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

- ii. We shall not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
- iii. We shall not use falsified documents, erroneous data or deliberately not disclose requested facts to obtain a benefit in a procurement proceeding.

We understand that transgression of the above is a serious offence and appropriate actions will be taken against such bidders.

- (k) We understand that this bid, together with your written acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive; and
- (m) If awarded the contract, the person named below shall act as Contractor's Representative:

Name:	
In the capacity of:	
Signed:	
Duly authorized to sign the Bid for and on behalf of:	
Date:	
Seal of Company	

Appendix to Bid Submission Form

#### **BID SECURING DECLARATION**

By subscribing to the undertaking in the Bid Submission Form:

I/We accept that I/we may be disqualified from bidding for any contract with any Mauritius Museums Council for the period of time that may be determined by the Procurement Policy Office under section 35 of the Public Procurement Act, if I am/we are in breach of any obligation under the Bid conditions, because I/we:

- (a) have modified or withdrawn my/our bid after the deadline for submission of bids during the period of bid validity specified by the Bidder in the Bid Submission Form; or
- (b) have refused to accept a correction of an error appearing on the face of the bid; or
- (c) having been notified of the acceptance of our bid during the period of bid validity, (i) have failed or refused to execute the Contract, if required, or (ii) have failed or refused to furnish the Performance Security, in accordance with the Instructions to Quote.

I/We understand this Bid Securing Declaration shall cease to be valid (a) in case I/we am/are the successful bidder, upon our receipt of copies of the contract signed by you and the Performance Security issued to you by me/us; or (b) if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our bid.

In case of a Joint Venture, all the partners of the Joint Venture shall be jointly and severally liable.

# **Qualification Information**

[The information to be filled in by **bidders** in the following pages shall be used for purposes of post-qualification or for verification of prequalification as provided for in ITB Clause 6. This information shall not be incorporated in the Contract. Attach additional pages as necessary. Pertinent sections of attached documents should be translated into English. If used for prequalification verification, the Bidder should fill in updated information only.]

1. Individual
Bidders or
Individual
Members of
Joint Ventures

1.1 Constitution or legal status of Bidder: [attach copy]

Place of registration: [insert]

Principal place of business: [insert]

1.2 Bidder shall provide *[insert number]* of works of a nature and amount similar to the Works performed as Contractor over the last 5 years.

Project/Contract name	Name of client and	Type of work performed	Value of contract
and country	contact person	and year of completion	(national currency)
(a)			
(b)			

1.3 Proposed subcontracts and firms involved. Refer to General Conditions of Contract Clause 7.

Sections of the Works	Value of subcontract	Subcontractor (name and address)	Experience in similar work
(a)			
(b)			

[Bidders have to ascertain that sub-contractors executing works are duly registered with the CIDB in accordance with CIDB Act 2008.

1.4 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Mauritius Museums Council.

#### 2. Additional

**2**.1 Bidders should provide any additional information Requirements requested in the Bidding Document.

# **Bill of quantities**

This text hereunder is a guidance for the preparation of the Bill of Quantities and should not form part of the final document.

#### **Objectives**

The objectives of the Bill of Quantities are:

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

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

#### **Dayworks Schedule**

A Dayworks Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Mauritius Museum Councilof the realism of rates quoted by the bidders, the Dayworks Schedule should normally comprise the following:

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

#### **Provisional Sums**

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary priced Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the Particular Conditions of Contract should state the manner in which they shall be used, and under whose authority (usually the Employer's Representative).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors (refer to GCC Clause 8) should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Mauritius Museums Council to select such specialized contractors. To provide an element of competition among the bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc

# BILL NO 1 - PRELIMINARIES AND GENERAL COSTS

ITEM		DESCRIPTION	UNIT	AMOUNT
	PRELIMINARY	Y PARTICULARS		
		all include in this Bill for all costs he considers attributable to necessary for the proper completion of the works which have in the unit rates.		
		elow for convenience of pricing. However, the Contractor is suring all costs are included whether or not an item is given.		
	Abbreviations			
A	assigned	nts the following abbreviations shall have the meanings		
	to them respectiv	•		
	BS	British Standard		
	MS	Mauritius Standard		
	CP	British Standard Code of Practice		
	Cu m or m3	Cubic metre		
	Sq m or m2	Square metre		
	Lin m or m	Linear metre		
	mm	Millimetre		
	Nr	Number		
	N	Newton		
	KN	Kilonewton		
	KG	Kilogram		
	(m/s)	Measured separately elsewhere in these Bills of Quantities		
	n.e	Not exceeding		
	dia.	Diameter		
	As described	Shall mean as described in the Contract and/or in these Bills of Quantities and/or in the Drawings.		
	Units			
В	All quantities and the	d dimensions in the Bills of Quantities, Specifications and		
		ven in the System International D'Unites" (S.I Units).		
		TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	PROJECT PARTICULARS		
	Location of the Works		
A	The site of the Works is located at SSR Memorial centre, SSR Street, Port Louis		
	Preliminary Investigation		
В	The Contractor is advised to visit the site before submitting his tender and ascertain the nature of the ground and subsoil to be excavated, the contours thereof and acquaint himself with local conditions, site conditions, site restrictions, working space available, means of access, limitations and restrictions to access, risk of damage to adjacent properties, roads, etc., the full extent and character of the operations, the facilities for obtaining the articles or materials for the works, the supply of labour and other matters affecting the execution of the Contract generally, as no claim whatsoever on the grounds of want of knowledge in such respect will be allowed.		
	TOTAL CARRIED TO COLLECTION		

	DESCRIPTION	UNIT	AMOU
Introductory N	<u>fotes</u>		
Definition of terms			
	ents and in the contract documents as defined, the following terms shall have the meaning assigned to them respectively		
Terms	Definition		
Contractor	The person or persons, firm, company or partnership whose tender for this work has been accepted; and who has or have signed this contract and shall include his or their heirs, executors, administrators, assigns, successors and duly appointed representatives		
Works	The work described and shown in the Contract Documents and any such further drawings, instructions or explanation as may from time to time be given to the Contractor by the Architect and any extra, different and additional work authorised under the Contract; and shall include all or any portion of the work, materials and articles, where ever the same are being manufactured or prepared, which are to be used in the execution of this Contract and whether the same may be on site or not		
Site	Shall mean land or other places on, under, in or through which the Works are to be executed or carried out.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
A	<u>Employer</u>		
	The term "The Employer" shall mean Mauritius Museums Council		
В	Project Manager		
	The term "The Project Manager" shall mean Ministry of National Infrastructure and Community Development, Technical Division, Phoenix		
C	EMPLOYER'S REPRESENTATIVE		
	<u>Architect</u>		
	The term "The Architect" shall mean Ministry of National Infrastructure and Community Development, Technical Division, Phoenix		
D	Civil and Structural Engineer		
	The term Civil and Structural Engineer shall mean Ministry of National Infrastructure and Community Development, Technical Division, Phoenix		
	Quantity Surveyor		
	The term "The Quantity Surveyor" shall mean Ministry of National Infrastructure and Community Development, Technical Division, Phoenix		
E	Mechanical and Electrical Engineer		
	The term <b>Mechanical and Electrical Engineer</b> shall mean Ministry of National Infrastructure and Community Development, Technical Division, Phoenix		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	CONDITIONS OF CONTRACT – MAIN CONTRACT  Contract Agreement and Conditions of Contract		
A	The General Conditions of Contract (GCC) applicable for this procurement is available on the web site of the Procurement Policy Office ppo.govmu.org under Ref: W/GCC10/12-21-14 dated December 2021		
	GENERAL SPECIFICATION AND OTHER DOCUMENTS		
	Generally		
В	The General Specifications are included in <b>Appendices 1, 2 &amp; 3</b> of the Bid documents. Where the General Specifications contain clauses related to any of the following General Requirements, these Bills of Quantities refer to those clauses in the General Specifications.		
С	The Contract Bills have been prepared in accordance with the principles of Measurement (International) for Works of Construction July 1979 Edition, issued by the Royal Institution of Chartered Surveyors, as may be amended by the special requirements of these Bills of Quantities.		
D	These principles of measurement must be accepted and will be strictly adhered to for the adjustment of any variations and for remeasurement as necessary.		
E	In order to assist Tenderers, certain drawings are issued with the Bills of Quantities. They are conceptual layout drawings illustrating only the broad scope of the work to be done. The drawings do not purport to show the exact details of the work and no claims in this connection will be entertained.		
F	The Contractor will be deemed to have examined these drawings and to have ascertained their details and the nature of the works and no claim for want of knowledge will be entertained.		
G	Photographic drawings showing existing items shall be provided in certain circumstances to assist Tenderers.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Bills of Quantities		
A	No unauthorised alteration in any of these Bills of Quantities is to be made by the tendering Contractor. Should any alteration, amendment, note or addition be made, it will not be recognised but the reading as printed will be adhered to.		
В	In the case of the Contractor leaving unpriced any of the items in these Bills of Quantities, he will be deemed to have considered that the rates of the remaining items are sufficient to enable him to perform the services and obligations described in the items not priced without extra charge.		
С	The Contractor is advised that the quantities, sizes, etc., contained in these Bills of Quantities should not be used for the purpose of ordering materials without checking from the working drawings or from site, as no claim will be entertained for costs incurred in over-or-under-ordering of materials.		
D	All prices or rates inserted in these Bills of Quantities are to be fully inclusive prices or rates for the finished work described under the respective items and/or drawings, unless otherwise stated or unless there is a separate item for extra labour, cutting or waste and are to include for all materials, making, conveying, cartage, carriage and delivery, unloading, storing, unpacking, hoisting or conveying, setting, fixing, and building into position and labour of every description, cutting and waste, templates, patterns and models, plant, temporary works, return of packings, taxes, levies, custom duties, surcharges, establishment charges, overheads, costs of all nature, and all obligations arising out of the Conditions of Contract, the provisions of Materials and Workmanship bills, the provisions of the Preliminaries bills and the execution of the relevant work. Prices for plant, temporary works, services and other items provided shall include for the supply, maintenance, fuel, operating costs and subsequent removal and making good as necessary.		
E	The prices for all items shall where applicable include for all small quantities, short lengths and narrow widths.		
F	The Contractor shall be held solely responsible for and shall, at his own expense, rectify any errors arising out of incorrect interpretation of the Drawings, Specifications, Bills of Quantities or instructions.		
G	The Contractor shall note that no claims whatsoever will be allowed in respect of errors or omissions in pricing due to brevity of descriptions of items in the Bills of Quantities which are fully described when read in conjunction with the relevant requirements of the Bill of General requirements and Specifications and/or the Conditions of Contract and/or drawings.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
A	All fourth and fifth level descriptions of items (i.e. description associated with units and quantities) shall be deemed to be read in conjunction with their respective first, second and third level general headings and all levels of descriptions and headings are to be taken as mutually explanatory of one another.  Shop Drawings		
В	The term " <b>shop drawings</b> " shall mean drawings, diagrams, schedules, performance charts, brochures, operating manuals and other data which are prepared by the Contractor or any Subcontractor, manufacturer or supplier and which illustrate some portion of the Works.		
С	The Contractor shall prepare, at his own expense, and shall submit two copies of shop drawings of all fabricated work, working or setting out drawings, shop details and schedules to the Engineer for approval by the Project Manager and such work shall not be executed by the Contractor until approved.		
D	The Contractor shall present a complete schedule showing submission dates, for all trades and the scheduled dates, for approval of all drawings. The Contractor shall note that the Project Manager and the relative Consulting Engineer require two weeks for checking from the date of the receipt of all shop drawings.		
E	All submissions shall be on dates as indicated in the above schedule and sufficiently in advance as no claim for extension of the Time for Completion will be granted to the Contractor by reason of his failure in this respect.		
F	The Contractor shall submit two copies of catalogues and data for approval. The Contractor shall check all submissions for conformity with the contract drawings and specifications and correct any errors, omissions or deviations before forwarding to the Project Manager.		
G	The Project Manager's approval of any document or drawing does not in any way vary his contractual obligations and liabilities to the owner or any other party, nor does it vary the contractual obligations and liabilities of the party submitting such document or drawing for approval.		
Н	Corrections of shop drawings by the Project Manager or his representatives shall not change the scope of Works. Should any such correction constitute a change of scope of Works, the Contractor shall notify the Project Manager in writing within not more than seven (7) calendar days of such change and shall not proceed with the fabrication until so authorised by the Project Manager.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	OBLIGATIONS AND RESTRICTIONS IMPOSED BY THE EMPLOYER		
	Site Boundaries		
A	The Site shall be defined by the boundaries shown on drawings and Survey Plans.  The Contractor shall, as soon as possible after his arrival on site, erect necessary hoarding around his work area.		
	Access to Site		
В	The Contractor shall take all reasonable precautions to prevent workpeople, including those employed by sub-contractors from trespassing on adjoining areas		
С	The Contractor shall allow for forming any temporary cross overs and other Works necessary for entry to the site, obtaining any way/eaves required any subsequently clearing away and making good all works disturbed or damaged.		
D	The Contractor is advised to visit the site and fully acquaint himself as to the nature, extent and practically of the works, he shall include in his tender for any costs in respect of availability or lack of access, working space, storage accommodation, the nature of the ground, the proximity of adjoining structures and roads, the regulations regarding any access obstruction and any other limitations imposed by State House.		
E	After taking possession of the site and before commencing work, the Contractor shall check the actual level against those shown on the drawings and in the event of any discrepancy, shall immediately notify the Project Manager.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
A	Site Conditions and Working space  The Contractor is advised that the site is located at Port Louis. The contractor shall confine his operations to the defined boundaries. The contractor shall erect temporary fencing at the site boundary all and he shall not encroach beyond such defined boundaries or areas of operation. The Contractor shall take special care not to disturb or hinder the flow of all traffic in any way whatsoever and shall allow for the unimpeded flow and operation of traffic whether vehicular or pedestrian, failing which he may be liable for any costs or any loss or damages incurred as a result thereof. He shall allow here or in his rates for the costs of the necessary measures that such restrictions may entail.		
В	Site to be tidy  The site shall be maintained in a neat, tidy and healthy condition and the Contractor shall remove all surplus spoil, waste and unwanted materials, debris and other litter from the site from day to day or as directed by the Project Manager.		
	Programme		
C	The Contractor is to prepare and submit to the two copies of the Programme. The submission of any drawings and samples for approval shall be in accordance with that Programme allowing sufficient time for consideration, comment and modification before approval, so that manufacture and installation are not delayed.		
D	The Programme shall include the planned monthly rates of progress between the programmed date for commencement and completion for all items of work for various stages of construction including dates by which major drawings requiring approval will be submitted. The Programme shall be in the form of a time and progress chart or a critical path network and shall also show a weekly schedule of labour and plant resources to be employed for each item of work of the Programme.		
Е	The Programme shall reflect the agreed completion date of the Works as set out in the Contract and shall indicate anticipated starting and completion dates for the various trades.  The Contractor shall ensure that the work is carried out and controlled in such a way that the Contract is completed by the completion date.		
	TOTAL CARRIED TO COLLECTION		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Contractor Designed Structures		
A	All Contractor design items shall be designed within an agreed period of time and		
	the Contractor shall be bound to submit all necessary information and calculations as required by the parties and consultants.		
	Area of operations		
В	Provide for taking reasonable precautions to prevent workpeople, including those employed by Subcontractors from encroaching or trespassing upon any part of		
	the site or premises which are not affected by the Works and from trespassing		
	upon adjoining and existing property except where permission be granted to facilitate the carrying out of the Works.		
	granted to facilitate the carrying out of the works.		
C	The Contractor shall be required to limit the construction activity, temporary buildings,		
	storage or equipment and materials etc. within the boundaries of the area allocated to him.		
D	Materials or objects of value found on site  Any materials or objects of value such as buried relics and the like, including		
	sand or gravel found on site when excavating are to remain the property of the Employer under		
	this		
	Contract and shall only be sold or removed as the Project Manager shall direct and access shall		
	be allowed to any authorised person instructed to remove same.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	CONTRACTOR'S ADMINISTRATIVE ARRANGEMENTS		
	Safety on site		
A	The Contractor shall take all necessary steps to ensure that the site is run in an orderly manner and that safety precautions are enforced to avoid accidents to the personnel of the Contractor and to other parties working on site and take all necessary measures for the safety of the public and property.		
	Site Management Costs		
В	Provide for all on and off site management costs.		
	Site Meetings		
С	The Contractor must hold such meetings as are necessary for the proper management of the Contract and the Project Manager may call progress meetings from time to time.		
	Safeguarding the Works		
D	Safeguard the Works, materials and plant against damage or theft including providing all necessary watching and lighting for the security of the Works and the protection of the public and for the prevention of unauthorised access to adjoining and existing property from the site. Provide facilities for any security guard employed.		
	Transport for workpeople		
E	Provide for all expenses in connection with transport of workpeople to and from the site and around the site including travelling expenses and fares.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Labour on-costs		
A	Provide for all costs in respect of all workpeople but not limited to the following:		
	(a) National Pension Contributions, training levy and contribution to Employee's welfare fund.		
	(b) Disbursements under the Sick Payments Scheme		
	(c) Annual and Public Holidays		
	(d) Travelling time, subsistence expenses and fares and all other like costs		
	(e) Non-productive time and other expenses in connection with overtime.		
	(f) Shutdown on account of cyclone warnings or adverse weather conditions		
	(g) Incentive and bonus payments		
	(h) Severance pay and obligations and workmen's compensation Insurance		
	(i) End of year bonus		
	(j) Protective clothing and equipment		
	(k) Any other disbursements arising from employment of labour, including complying with the provisions of Employment's regulations.		
	Overtime		
В	No payment will be made for any overtime incurred for the purpose of maintaining progress and for ensuring completion as stipulated in the Contract.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	CONSTRUCTIONAL PLANT		
	Plant		
A	Provide all plant and equipment necessary for the proper execution of the Works		
	both mechanical plant and vehicles and non-mechanical plant and tools,		
	including: -		
	(a) Small plant and tools		
	(b) cranes and lifting plant		
	(c) site transport		
<b>D</b>	(d) plant and equipment for all other trades		
В	The Contractor shall allow for altering, adapting and maintaining all such plant as necessary		
	and at or before completion clear away same from the building and site and		
	make good		
	all work disturbed.		
	Scaffolding		
C	Provide all necessary scaffolding for the proper and efficient execution and		
	completion of the Works		
	EMPLOYER'S FACILITIES Site signboard		
D	<b>Site signboard</b> Provide and erect one site signboard 2.4m wide x 2.4m long set 2.0m above		
D	ground as		
	approved by the Project Manager to show the title of the Works and the name		
	and address of		
	Employer and Consultants and if so desired of the Contractor and with a drawing		
	to be supplied by the Contractor and approved by the Project Manager.		
	Employer's Accomodation		
F	Provide suitable office accommodation for the purpose of holding meetings by		
•	the Project Manager and its consultants, maintain throughout the duration of the		
	Contract and		
	clear away on completion and make good.		
	The office is to be sufficiently largein floor area with clear headroom		
	comprising the rooms for Consultants and a meeting room to accommodate		
	fifteen people and shall include all necessary facilities such as adequate		
	electrical installation, mechanical ventilation and Air Conditioning throughout.		
	The office shall be equipped with the following:		
	(a) Meeting room with an area of 20 m2 and with a table of 1.2 x 2.4 m with 24		
	no chairs		
	(b) One Four-drawer steel lockable filling cabinet at 1.8 m high		
	(c) Two desks at least 1.5 m x 0.9 m with lockable drawers and chairs		
	(d) Two Pinboard 3 x 1.2 m		
	(e) One First Aid Box		
	(f) One Fire Extinguisher		
	(g) One Water dispenser with regular replacement of bottle water		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Contractor's use of buildings		
A	The Contractor will not be permitted to use any part of the new buildings when constructed		
	for messrooms, offices or other accommodation for workpeople employed on the		
	site.		
	Use of existing services		
В	The Contractor will not be permitted to make connection to the existing water or		
	electricity supply or any other existing services.		
C	Water for the Works		
C	Provide clean fresh water for use on the Works, pay all charges in connection therewith, and provide all connections, temporary storage, distribution pipes and		
	plumbing etc. and shall remove same and make good surfaces disturbed to the		
	satisfaction of the Project Manager and pay all charges in connection therewith.		
	Lighting and power for the Works		
D	Provide all artificial lighting and power for use on the Works, pay all charges in		
	connection therewith and provide all necessary connection, switchgear, fuses,		
	distribution boards and all necessary arrangements and equipment for		
	distribution about the site. The Contractor shall alter, adapt, remove and make		
	good on completion.		
	Temporary roads		
${f E}$	The Contractor shall use access to the site as directed by the Project Manager		
	and shall provide and maintain all necessary temporary roads, hardstandings, crossings,		
	footways and the like on site.		
$\mathbf{F}$	Any damage done to existing site conditions by the Contractor or his		
	Subcontractors must be reinstated and made good to the satisfaction of the		
	Project Manager, at the Contractor's own expense.		
~	Temporary accommodation		
G	All temporary offices are to be of good design and standard approved by the		
	Project Manager and are to be sited in locations agreed with the Project Manager.		
Н	Provide adequate temporary sheds, offices, and other accommodation required		
	for the works to be executed under this Contract including all necessary on-site		
_	and off-site storage and provide lighting, equipment and attendance.		
I	Provide temporary sanitary accommodation, messroom and other welfare facilities for		
	all the workpeople employed under this Contract including Subcontractors		
	and persons		
	employed or engaged by the Employer and provide lighting equipment and		
	attendance. Such accommodation shall be to the approval of the Project Manager and shall		
	be of a standard		
	and size suitable for the number of work people employed.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Temporary telephone		
A	Allow for the provision of a temporary telephone service for the Contractor's own use		
	Temporary fencing, screens, etc.		
В	Provide all necessary temporary fencing, hoarding as oer drawing, screens, fans, planked		
	footways, guardrails, gantries and the like to seal off the site and for the		
	protection of the public and the occupants of adjoining premises, for the security of the site and for meeting the		
	requirements of any local or statutory authority, law or regulations and to the satisfaction		
	of the Project Manager. Provide all necessary lighting to same at night and for removing		
	and making good any damage resulting therefrom on completion.		
	Daily Diary		
C	The Contractor shall keep a daily diary which interalia, shall provide a record of inclement		
	weather, on-site labour complement of the Contractor and all Subcontractors, deliveries,		
	delays, plant and equipment details and the like in a format approved by and to the entire		
	satisfaction of the Project Manager. The diary shall be available for inspection by the		
	professional team when required and the Contractor shall provide the Engineer with		
	copies of such records.		
	SUNDRY AND GENERAL ITEMS		
	Protecting the Works		
D	From the beginning to the completion of the Works, they shall be under the entire care and		
	control of the Contractor and he shall allow for covering up and protecting all work		
	liable to damage including the provision of temporary roofs, gutters, drains, etc., if necessary,		
	and he shall case-up, cover, or in other suitable way protect all finished work liable to injury, to		
	the satisfaction of the Project Manager, until completion of the Contract.		
E	The Contractor shall be entirely responsible for the security of all the works, stores,		
L	materials, plant, personnel, etc., both his own and Subcontractors' and shall		
	provide necessary watching, lighting, barriers, hoardings and other precautions necessary		
	to ensure the security and the protection of the public. He shall take all possible		
	precautions to prevent any nuisance, inconvenience or injury to the holder or occupiers of		
	surrounding properties and shall at all times keep all paths and roads affected by the		
	Works in a safe and clear state.		
F	The Contractor will be held entirely responsible for the adequacy of the covering up protection		
	afforded against damage by adverse weather or otherwise and he shall make good any such		
	damage at his own expense. He shall suspend all operations during such weather conditions		
	, which in the opinion of the Project Manager would be detrimental to the works.		
	TOTAL CARRIED TO COLLECTION		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Protection of public and private drains and Services		
A	Protect, uphold and maintain all existing live drainage, water, and other mains or ducts, power services, overhead cables etc., whether on or off the site, during the execution of the Works.		
	Statutes and Government regulations		
В	Provide for all costs incurred by complying with all safety, Health and Welfare Acts etc., and other current statutes, Regulations and Industrial Agreements applicable to the construction industry.		
C	The Contractor will be required to satisfy the Project Manager at regular intervals that all necessary precautions have been and are being taken to secure the health, safety and welfare of all persons upon the site (whether in his employment or otherwise) and to protect all persons against risks to health or safety arising out of or in connection the activities of persons at work on the site of the Works and will be required to introduce as the Project Manager may determine are necessary to comply with regulations currently in force.		
D	Nothing in these clauses shall be constructed as in any way relieving the Contractor of his obligations at law to comply with current legislation.		
	Maintenance of roads and services		
E	Maintain public and private roads, footpaths, kerbs, etc., and keep the approaches to the site clear of mud, other debris and the like. The Contractor is to make good any damage caused by his own or any Subcontractor's or Supplier's transport at his own expense or pay all costs and charges in connection therewith.		
F	The Contractor shall protect, uphold, and maintain all pipes, sewers, watermains, overhead cables and services etc. during the execution of the work and is to make good any damage caused or pay any costs and charges in connection therewith.		
	TOTAL CARRIED TO COLLECTION		

A	Removing rubbish and cleaning the works	
Λ		
A	Provide for removing all protective casings and coverings and removing all rubbish from the	
	site as it accumulates from day to day and from time to time and, on completion, clean the	
	buildings inside and out, including thoroughly cleaning all floors and pavings, easing and	
	adjusting all doors, ventilators, casements etc., cutting out all cracks and blisters in plasterwork	
	and repairing, removing stains and touching up paintwork or polished work, oiling and	
	adjusting all ironmongery, window fittings etc., cutting out broken glass and replacing with	
	new, cleaning all glass inside and out and leaving the whole of the Works clean and tidy to the	
	satisfaction of the Project Manager on completion	
	Temporary Use of Equipment	
В	No equipment which is a part of the permanent installations shall be operated or used, during	
	the course of construction without the written permission of the Project Manager.  Testing Charges	
C	The Contractor shall allow herein for all costs incurred in connection with the provision	
	of tests of all materials, tests for any section of the works and the whole of the Works upon completion	
	as required by the Project Manager, the production and provision of samples of materials,	
	workmanship and the like as required by the Project Manager.	
	Advertisements and notices	
D	No advertisements will be permitted on the fencing, hoardings or any other part of the Works	
	and Contractor shall not erect or allow any other persons to erect any sign, notice, display or	
	advertisement of any kind on any part of the site buildings or hoardings, unless authorised in	
	writing by the Project Manager and he shall remove any such unauthorised advertisement	
	immediately he is called upon to do so.  Samples	
E	The Contractor shall allow herein for all costs incurred in connection with the provision of	
	samples and mock-ups of any material, workmanship or building components. The Project	
	Manager shall have the right to reject any materials or workmanship not in conformity	
	with the approved samples.	
F	Samples shall be physical examples to illustrate materials, equipment or workmanship,	
	and to establish standards by which the works may be judged. Such samples, after approval,	
	will be retained by the Engineer for a period sufficient to ascertain that the relevant component	
	is actually provided as per such sample.	
	TOTAL CARRIED TO COLLECTION	

ITEM	DESCRIPTION	UNIT	AMOUNT
	Nuisance		
A	The Contractor shall take all proper precautions for the prevention of nuisance, inconvenience		
	etc. to adjoining property or persons and shall allow for the work to be carried out at such		
	times and in such order as not to cause any nuisance or inconvenience.		
-	Opening up of work		
В	The Contractor shall, at the request of the Project Manager within such time as the Engineer shall name, open for inspection any work covered up; and should the Contractor refuse or		
	neglect to comply, the Employer may employ workmen other than those employed by the		
	Contractor to open up the same. If the said expenses of opening and covering it up against, whether		
	done by the Contractor or by the Project Manager shall be borne by and be recoverable from the		
	Contractor or may be deducted from any monies due to the Contractor. Provided always that in the		
	case		
	foundations or of any other urgent work so opened up and requiring immediate attention the		
	Engineer shall within a reasonable time after receipt of notice from the Contractor that the		
	work has been so opened, make or cause to be made the inspection thereof.		
C	Contractor to do everything necessary  The Contractor shall allow opposite this item or in the prices/rates throughout these Bills		
C	of		
	Quantities for working all overtime, weekends, public holiday etc., and for doing everything		
	necessary to complete the Works and the individual sections thereof by the stipulated dates.		
	Checking of drawings/Discrepancies		
D	Upon receipt of construction drawings for any work, the Contractor shall, before putting that		
	work in hand, ensure that there are no discrepancies within the drawings and also between the		
	Architectural, Structural and Services Drawings. He shall ascertain that the dimensions given		
	on the drawings correspond with the dimensions of any work already built and which governs		
	the sizes of any work for which details are not issued. In the event of any discrepancy on the		
	drawings or not agreeing with the Works already built, the discrepancy shall be brought to		
	the Engineer's attention and the drawings shall be returned at once for alteration.		
	Figured Dimensions		
E	All dimensions will be figured on the drawings or may be calculated from figured		
	dimensions and are always to be followed. No dimensions shall be obtained by scaling. Dimensions		
	where possible are to be taken from the building.		
F	The Contractor shall check all dimensions on any drawings before putting any work in hand.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	Site records and samples		
A	Allow for keeping and providing records of all site levels, observations, site tests and		
	laboratory tests on materials or sections of the work as directed.		
В	Allow for all samples, site observations, site tests, laboratory tests and analyses as directed.		
C	Allow for providing reports site diaries and returns as directed.		
D	Allow for providing samples of all Engineering components as directed.		
	Progress Photographs		
E	Provide for colour photographs to show the Works in progress. Photographs shall be taken		
	with digital camera every two weeks or as when required throughout the construction period.		
	Each time, there must be sufficient shots to cover all construction fronts and they are to be printed		
	in the size of 4 photographs in one A4 page, dated and suitably captioned shall be supplied to the Engineer.		
F	Locations of the photographs to be taken shall be agreed with the Project Manager. Each		
	photographs shall be marked with the description of the photograph and location from which it was taken.		
G	The ownership and copyright of all photographs shall be vested in the Employer and are not to		
	be used without his permission under any circumstances. Prints shall be handed over		
	to the Project Manager monthly.		
	TOTAL CARRIED TO COLLECTION		

ITEM	DESCRIPTION	UNIT	AMOUNT
	COLLECTION		
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	TOTAL CARRIED TO MAIN SUMMARY		

# **BILL NO 2.1 - GENERAL WORKS**

ITEM	DESCRIPTION  DESCRIPTION	UNIT	QTY.	RATE	AMOUNT		
					Rs	Cs	
	BILL NO. 2 - REFURBISHMENT WORKS						
A	Generally Provide all necessary protection against cyclonic weather, torential rain, dust or waterproof screen, tarpaulins, barriers etc to render the existing building, other than the sections alerted, entirely dust and weather proof and properly protected to the satisfaction of the Architect and remove when directed	Item					
В	Provide suitable shoring or strutting screen, scaffolds etc necessary to ensure the stability if the structure and all the works during the breaking down, alterations or building up of the works	Item					
С	Allow for providing special care so as not to interfere unnecessarily with any services installations that may be met with	Item					
D	Allow for providing all boarding and coverings to protect the existing structure where necessary including protecting all furnitures, floors, finishes, windows, doors, ceilings, roofs, etc during demolition works.	Item					
Е	The Contractor must at his own expense make good in all trades to existing work (other than that required to be altered) which is damaged or disturbed during the alterations with all necessary new materials to match and generally as specified for new work and leave complete and perfect in every respect where existing structure is to be preserved.	Item					
F	Where only a portion of the building is required to be demolished, special care to be exercised to prevent damage to remaining portions. Any necessary making good in all trades due to such damage will be at the Contractor's own expense and prices must include, temporary supports, making good etc.	Item					
G	The Contractor shall carry put a thorough survey and examination of buildings or structures to be demolished or removed	Item					
	TOTAL CARRIED TO COLLECTION BILL 2.2						

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT	
					Rs	Cs
	Section 2.1 - General Refurbishment Works					
A	The Contractor shall locate and mark the position of existing services affected by the alteration work and allow for refixing after the works	Item				
В	Disconnect temporarily existing electrical installations and other services and handover luminaries and equipment to Employer as instructed	Item				
С	Refixing of all dismantled electrical installations and services including testing and commissioning	Item				
D	The Contractor shall carry out a thorough survey of all apparent or buried existing services, divert of those services likely to interfere with construction works, provide and maintain connection/supply to other areas of building during construction works	Item				
Е	Apply an approved anti-termite treatment undertaken by an approved specialist (Minimum ten years guarantee) to entire building, existing perimeter partitioning and to all existing and new timber works including flooring, structural timber, boarding and existing surroundings, etc	Item				
F	Treat all existing and new timber including flooring, structural timber, etc with an approved fire-retardant attaining Class B requirements i.e. minimum One Hour Fire Resistant. The treatment shall be cariried out by an approved specialist.	Item				
	-  -  -  -					
	TOTAL CARRIED TO COLLECTION BILL 2.2					

# **BILL NO 2.2 - REFURBISHMENT WORKS**

					AMOUNT
ITEM	DESCRIPTION	UNIT	QTY.	RATE	Rs Cs
	BILL NO. 2.2 - REFURBISHMENT WORKS				
	Section 2.2 - Refurbishment Works DRG NO.RFW/01-16- RFW/ST01-06				
	FLOOR FINISH Carefully hack, dismantle and remove all existing carpet, vinyl, ceramic floor tiles, existing floor finishes and carefully hack and remove existing screed, clean afterwards so as to receive new reinforced fibre screed. All debris to be carted away or hand over to Employer as directed				
A	Existing floor finish and screed	m²	95		
	Floor Repairs  Carefully clean, open existing cracked flooring and repair damaged flooring all to Eng's approval and as per DWG NO RFW/ST03. Rate to include treatment and making good afterwards				
В	- Flooring	m	6		
	Carefully demolish, clean, repair and cart away existing damaged concrete flooring along external floor drain and make good afterwards. Rate to include labour, materials and plant.				
C	- Flooring	sum	-		
	New Floor Finishes  Supply and Lay new fibre reinforced concrete screed of maximum thickness 40mm. Specifications and methodology to be approved by Arch and Eng Prior to laying of screed. Refer to DWG RFW/02				
D	Fibre Reinforced Concrete Screed <u>Supply and Lay New "Beton Ciree" Floor finish. Colour and Specifications to be approved by Arch Prior to laying. Refer to DWG RFW/02</u>	m3	4		
Е	- New Floor Finish "Beton Ciree"	m²	95		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT Rs Cs
	TIMBER WORKS  Carefully take down the following component and hand over to Employer, include for preparation inventory list for client and protecting of existing structures/finishes during repair works				CS
	Structural timber works including trusses, rafters, joists, battens, purlins etc includind damaged bracings, connections, shoes, etc				
A	Timber Posts 100x100mm (Elevation 1 & 2)	m	54		
В	Timber Rafters and braces 100x100mm (Elevation 1 & 2)	m	74		
	The following timber structures to be in new treated Balao timber all bolted and jointed, free from knot, including all overlaps, cutting and shaping at ends where required fixed to concrete/masonry/timber elements as per drawing and Architect's and Engineer's approval.				
C	Timber Posts 100x100mm (Elevation 1 & 2)	m	54		
D	Timber Rafters and braces 100x100mm (Elevation 1 & 2)	m	74		
E	Timber Posts 100x100mm	m	65		
F	Timber Rafters and braces 100x100mm	m	89		
G	Timber Purlins 75x75mm	m	52		
Н	Connections Supply and fix the following special designed galvanised metal connections to Engineer's specifications. Plates, bolts, straps, brackets, shoes and the like to timber member  Steel plates bolts, straps, cleats, shoes, brackets and the like to Contractor designed connections and joints to timber members.	kg	200		
	Kicker Supply and lay new concrete kicker size 150x150mm. Rate to include cleaning and hacking existing beam, apply epoxy agent, reinforcements, formwork, dowel bars etc as described in DWG RFW/ST03				
I	150X150mm concrete kicker	m	80		
	TOTAL CARRIED TO COLLECTION				

					AMOUNT
ITEM	DESCRIPTION	UNIT	QTY.	RATE	Rs Cs
<u> </u>	WALL FINISHES				Cs
	Carefully dismantle and remove all existing timber partition to expose timber structures, include for propping and protection during repair works. All debris to be carted away or hand over to Employer as directed				
A	Existing internal partitions	m²	215		
	Carefully dismantle and remove existing timber façade including removal of openings, timber slats and existing features. All debris to be carted away or hand over to Employer as directed. Contractor to take all nessary precautions to protect the exposed facade. Dwg No RFW/08 & RFW/09				
В	Façade on Elevation 1 (10000x2500mm approx)	nr	1		
C	Façade on Elevation 2 (10000x2500mm approx)	nr	1		
D	Façade on Elevation (2500x2500mm approx)	nr	1		
	Supply and install 12mm thick plywood timber partition fixed to (timber braces measured elsewhere) and timber framing structure/battens, - to match existing supports, all to Arch' Approval. Partition to be primed and painted with two coats, colour to match existing as per Arch's Approval. Refer to DWG RFW/04				
E	12mm thick plywood partition	m²	215		
	Supply and fix new external timber façade made of treated balao or equivalent as approved by the architect, including new timber slats, all as per existing design and to Arch's approval. Dwg No RFW/08 & RFW/09. Openings measured in section openings.				
F	Façade on Elevation 1 (10000x2500mm approx)	nr	1		
G	Façade on Elevation 2 (10000x2500mm approx)	nr	1		
Н	Façade on Elevation (2500x2500mm approx)	nr	1		
	General repairs to external corrugated zinc aluminum sheeting where required. As per Arch's approval				
I	General repairs	sum	-		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	UNIT	<i>QТҮ</i> .	RATE	AMOUNT Rs Cs
	FALSE CEILING WORKS				
	Carefully dismantle and remove all existing false ceiling and damaged fixation supports. All debris to be carted away or hand over to Employer as directed				
A	- Existing false ceiling	m²	95		
	Supply and install 12mm thick plywood false ceiling including fixing fixation supports/battens where required to match existing supports, all to Arch's approval. Dwg No RFW/06.				
В	False ceiling	m²	80		
	Supply and install 12mm thick plywood false ceiling including fixing fixation supports/battens where required to match existing supports, all to Arch's approval. Dwg No RFW/06.  Rate to include supply and fix decorative molded pattern to match existing false ceiling.				
С	False ceiling with decorative plastic molded pattern	m²	15		
	TOTAL CARRIED TO COLLECTION				

					AMOUNT		
ITEM	DESCRIPTION	UNIT	QTY.	RATE	Rs Cs		
	ROOF WORKS				CS		
	Carefully take down the following component and hand over to Client, include for preparation inventory list for client and protecting of existing structures/finishes during repair works						
A	Timber shingles, complete with waterproofing roof felt, include for packing teak shingles in bundles	m²	65				
	Carefully dismantle and remove all existing timber boarding and set aside for re-use under shingles covering to expose timber frame structure. All excess materials to be carted away or hand over to Employer as directed						
В	Timber boarding (Sheathing)	m²	10				
	Carefully take down the following component and hand over to Client, include for preparation inventory list for client and protecting of existing structures/finishes during repair works						
C	Galvanised metal sheets including existing flashing	m²	47				
	The following new treated tongue and groove timber hardwood roof boarding, free from knots, including all overlaps, cutting, moulding, chamfer, scribed end, rounded cornices, raking cutting, grooves, circular cutting, rebates, mitres, intersections, splay, shaping at ends where required, wrot unless otherwise stated, fixed to timber existing structure, with and including stainless steel screws and nails, all to Architect's and Engineer's approval						
E	Timber boarding (Sheathing)	m²	10				
	Bituminous roof felt  Bituminous roofing felt waterproof membrane laid on timber boarding with 150 mm minimum side and head laps, including all necessary cutting, to manufacturer's specifications and Engineer's approval to roof boarding to:						
F	Roof	m²	65				
	TOTAL CARRIED TO COLLECTION						

						AMOUNT
ITEM	DESCRIPTION	UNIT	QTY.	RATE	Rs Cs	
	ROOF WORKS CONTINUED				CS	
	Now Timbou Chinalas					
	New Timber Shingles  The following new Teak timber shingles, wrot, sand, polish					
	and treat with impregnated CCA preservative shingles. Shingles fixed with corrosion resistant nails suitable to resist					
	cyclonic wind speed of over 280 km/hr, laid to the appropriate					
	gauge for water tight structure. Price to include also all appropriate sized copper ridge, flashing and hip capping and					
	extra shingles for verges and eaves and valleys. Shingles to be					
	made of treated kerwing wood or equivalent as approved appropriate by the Architect.					
A	Shingles laid on boarding and felt on roof	m²	65			
	Prepare and apply one coat of primer and two coats of acrylic					
В	roof paint or similar to Architect's approval	m²	65			
Б	General surfaces of shingles	111	05			
	New Roof Sheeting					
	New corrugated zinc aluminum sheeting of minimum					
C	thickness 0.7mm, colour to match existing one or equivalent as per Arch's approval	m²	47			
	<b>Flashing</b>					
D	Supply and lay GMS flashing at gutter as shown on drwg	m	20			
	Supply and lay GMS flashing at intersection of corrugated iron sheet and shingles as shown on drwg	m	20			
	Repairs to gutters					
	Carefully survey and identify damaged gutters and structures					
	and allow for repairs. The repairs shall comprise of the dismantling of existing timber shingles and boarding (kept for					
	re-use) to expose structures, fixing in position of new concrete					
	kicker with all necessary concrete works, formwork, reinforcement, dowelling, protection and the like and new					
	timber members as required, waterproofing to gutters and refixing of roof with boarding, roofing felt and shingles. Rate					
	to include all connections, fixing accessories, finishes and					
	protecting of existing structures/finishes during repair work as per drawing. All to Architect's and Engineer's Instruction and					
	Approval.					
Е	Supply and fix New Gutters (same as existing ones as shown on dwg RFW/08), including decorative features, Fittings and	m	18			
	support					
	TOTAL CARRIED TO COLLECTION					

ITEM	DESCRIPTION	UNIT	OTV	RATE	AMOUNT Rs
			QTY.	1	Cs
	Rainwater Drainage Rainwater pipe in copper to BS laid and jointed in accordance with manufacturers' instructions, including bends, outlets, fullbora, etc.				
A	Replace 110mm diameter rain water pipe fixed to walls with clamps clips including all finishes to match existing one as specified	m	13		
	<b>Decorative Roof features</b>				
	Cleaning, making good and apply 2 coats of finish paint all as per Arch's approval. All to match existing features. DWG RFW/08-12. Rate to include removal and refixing after repairs.				
A	Existing corrugated Fascia metal plate including decorative piece as shown on Elevation 1, 2,3&4	m	14		
В	Existing decorative lambrequins	m	17		
С	Existing corrugated metal element on roof	sum			
D	Timber Access Trap	sum			
E	Metal Flashing	sum			
	TOTAL CARRIED TO COLLECTION				

					AMOUNT	
<i>ITEM</i>	DESCRIPTION	UNIT	QTY.	RATE	Rs	
A	Carefully dismantle and remove all existing openings and set aside, to be carted away or hand over to Employer as directed by the Arch  Internal Doors  Carefully dismantle and remove all existing External openings and set aside, to be carted away or hand over to Employer as directed by the Arch	nr	8		Cs	
В	Door D1 (1100X2305mm)	nr	8			
C	Door D2 (955X2025mm)	nr	1			
D	Door D3 (955X2215mm)	nr	1			
	Elevation 3					
E	Window (670x1025mm)	nr	1			
F	Window (1060x525mm)	nr	2			
G	Door (610x2110mm)	nr	1			
	Elevation 4					
Н	Window (745x510mm)	nr	1			
I	Window (850x2050mm)	nr	1			
J	Window (750x1745mm)	nr	1			
K	Window (565x1380mm)	nr	1			
L	Window (710x1380mm)	nr	1			
M	Door (755x2235mm)	nr	1			
	TOTAL CARRIED TO COLLECTION					

ITEM	DESCRIPTION	UNIT	рту.	RATE	AMOUNT Rs
A	Supply and Fix New Openings as shown on DWG RFW/15-16. Rate to include fixation of door, varnish, paint, window panes, lock, padlock, hinges and accessories, architraves, etc. All as per Arch' approval  Internal Doors D4 (860X2110mm)  Supply and Fix New Openings as shown on DWG RFW/15-16. Rate to include fixation of door, varnish, paint, window panes, lock, padlock, hinges and accessories, architraves, etc. All as	nr	8		Cs
	per Arch' approval				
В	Door D1 (1100X2305mm)	nr	8		
С	Door D2 (955X2025mm)	nr	1		
D	Door D3 (955X2215mm)	nr	1		
	Elevation 3				
E	Window (670x1025mm)	nr	1		
F	Window (1060x525mm)	nr	2		
G	Door (610x2110mm)	nr	1		
	Elevation 4				
I	Window (745x510mm)	nr	1		
J	Window (850x2050mm)	nr	1		
K	Window (750x1745mm)	nr	1		
L	Window (565x1380mm)	nr	1		
M	Window (710x1380mm)	nr	1		
N	Door (755x2235mm)	nr	1		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	UNIT	дту.	RATE	AMOUNT Rs Cs
	Carefully dismantle and repair existing damaged corrugated overhang including timber overhang, fixations, etc. Rate to include removal, making good, repair to existing overhang to match existing and refixing, all as directed by the Arch.  Overall dimensions ranging from 1150mm to 1600mm in length				
A	Corrugated Overhang	nr	3		
	Carefully dismantle and repair existing damaged wooden shutters as shown on DWG RFW/15-16. Rate to include repairing, painting and fixation including fixation accessories				
В	Wooden Shutters (Elevation 4)	nr	2		
	TOTAL CARRIED TO COLLECTION				

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT Rs Cs
A	Supply and Apply Anti- Termite treatment. Specifications to be approved by Arch.	m²	100		
В	New Kitchen Furniture including granite/quartz, sink, tap and accessories	nr	1		
	TOTAL CARRIED TO COLLECTION				

Section 2.2 - Refurbishment Works		
COLLECTION BILL 2		
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TOTAL CARRIED TO MAIN SUMMARY		

# **BILL NO 3 – ELECTRICAL WORKS**

Item No	Description of works	Unit	Qty	Unit Price /Rs	Total Price /Rs
	Supply, install, test and commission of the following:				
	Distribution boards to be as per schematic and				
1.0	specifications c/w all associated materials				
1.1	Main Distribution Board (MDB)	Lot	1		
1.2	MCB 80 A DP	No	1		
1.3	MCB 25A DP	No	1		
1.4	Busbar 125A	No	1		
1.5	RCBO 2P 10A	No	4		
1.6	RCBO 2P 20A	No	10		
1.7	VSP 20 kA	No	1		
2.0	Luminaires				
2.1	Aluminium 3-circuit Power Track System	m	42		
2.2	TYPE A, Spot on rail 10 W LED	No	37		
2.3	TYPE B, Led Panel, 40 W LED	No	1		
2.4	TYPE C, Bulkhead, 9W LED	No	2		
2.5	TYPE D, Batten LED waterproof 10 W	No	9		
2.6	TYPE D, Batten LED waterproof 20 W	No	1		
2.7	TYPE E, Emergency Light LED 3 W	No	4		
2.8	Type F, Floodlight 50 W LED	No	1		
2.9	Type G, Downlight 8 W LED	No	18		
	71 7 0				
3.0	Switches				
3.1	Dimmer	No	4		
3.2	1 gang 1 way	No	10		
3.3	2 gang 1 way	No	3		
3.4	1 gang 1 way waterproof	No	2		
4.0	Removal/dismantling of existing electrical items	Lot	1		
	TOTAL CARRIED TO COLLECTION				

Item No	Description of works	Unit	Qty	Unit Price /Rs	Total Price /Rs
	Supply, install, test and commission of the following:				
5.0	Cabling				
5.1	25 mm <sup>2</sup> 3-core from CEB meter to MDB	Lot	1		
5.2	1.5 mm <sup>2</sup> 3-core	Lot	1		
5.3	2.5 mm <sup>2</sup> 3-core	Lot	1		
6.0	Sockets				
6.1	Double socket (13 A + 16 A)	No	18		
6.2	Single socket 13 A waterproof	No	1		
6.3	Single socket 13 A	No	2		
6.4	Double pole switch 25 A	No	3		
7.0	Conduit complete with accessories				
7.1	Flexible conduit/PVC conduit	Lot	1		
8.0	Telephone installations				
8.1	Telephone junction box	No	1		
8.2	Telephone sockets RJ 11	No	2		
8.3	Telephone cabling	Lot	1		
9.0	Ventilating fans				
9.1	Wall fans	No	2		
9.2	Ceiling fans	No	3		
	Hand Dryer				
10.1	Hand Dryer	No	2		
11.0	Fire Alarm System				
11.1	Panel	No	1		
11.2	Smoke Detector	No	7		
11.3	Heat Detector	No	2		
11.4	Manual call point	No	5		
11.5	Low intensity sounder	No	1		
11.6	Cabling	Lot	1		
11.7	Dry powder Fire Extinguisher	No	2		
11.8	Carbon Dioxide Fire Extinguisher	No	2		
	TOTAL CARRIED TO COLLECTION				

Item No	Description of works	Unit	Qty	Unit Price /Rs	Total Price /Rs
	Supply, install, test and commission of the following:				
12	Air conditioning units				
12.1	9,000 Btu	No	1		
12.2	12,000 Btu	No	2		
13	Earthing				
13.1	Earthing system complete with all accessories	Lot	1		
14.0	Drawings				
14.1	Shop drawings	Lot	1		
14.2	As-Made Drawings	Lot	1		
4= -					
15.0	Testing and Commissioning				
15.1	Testing and commissioning Certificate	Lot	1		
15.2	OM Manuals	Lot	1		
	TOTAL CARRIED TO COLLECTION				
	TOTAL CARRIED TO COLLECTION				

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Section 3 – Electrical Works		
COLLECTION BILL 3		
COLLECTION BILL 3		
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TOTAL CARRIED TO MAIN SUMMARY		

# **BILL NO 4 - CONTINGENCIES**

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT Rs
	- DILL NO 4 CONTINCENCIES		2111		Cs
A	BILL NO. 4 - CONTINGENCIES  Allow the sum of Rs 350,000 to be spent at the discretion	Sum			350,000.00
	of the employer				
	TOTAL CARRIED TO MAIN SUMMARY				350,000.00

# **BILL NO 5- ANY OTHER WORKS**

ITEM	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT Rs Cs
	BILL NO. 5- Any other Works				
	Any other works/items not listed in the Bill of Quantities but which are deemed to be carried out as per specifications and drawings for successful completion of the project should be inserted here as sum. Bidders shall submit a breakdown of the quote giving list of items description, unit, quantity and amount in the template Detailed BOQ for Works				
	TOTAL CARRIED TO MAIN SUMMARY				

**MAIN SUMMARY** 

SECTION	DESCRIPTION	B/F	AMOUNT
SECTION	DESCRIPTION	D/F	RS CS
	REFURBISHMENT WORKS AT SSR MEMORIAL MUSEUM, PORT LOUIS		
	<u>MAIN SUMMARY</u>		
	BILL NO 1 - PRELIMINARIES AND GENERAL COSTS	1:S	
	BILL NO 2 - REFURBISHMENT WORKS	2:S	
	BILL NO 3 - ELECTRICAL WORKS	3:S	
	BILL NO 4 - CONTINGENCIES	4:S	350,000
	BILL NO 5- ANY OTHER WORKS	5:S	
	TOTAL AMOUNT EXCLUDING VAT	Rs.	

# **Bill of Quantities Authorised By:**

Name:			Signa	ture:	
Position:			Date:		
Authorised for and	on behalf of:	Compa	ny		

# **Section III: Statement of Requirements**

#### A. SCOPE OF WORKS AND SPECIFICATIONS

# A1 Scope of Works

The project consist of the refurbishment of the SSR Memorial Centre for Culture at Plaine Verte. The detailed scope of works is as more fully described in the bidding drawings and specifications incorporated in Section III-Statement of requirements and Bill of Quantities and as highlighted hereunder:

- Prior to demolition, the Contractor must carry out a photographic survey of all existing structures and amenities;
- Demolition works;
- Preservation of certain amenities such as carpets and its re-fixing;
- Complete replacement of front and left hand side wall;
- Replacement of damaged structural hardwood;
- · Replacement of timber paneling internally;
- Replacement of corrugated iron sheets external cladding;
- Replacement of timber doors, windows etc...;
- Repair to damaged flooring and provision of new flooring;
- · Replacement of false ceiling;
- Replacement of shingle roof and corrugated iron sheets;
- Electrical works;
- Anti-termite treatment to all timber works;
- Any other works detailed in the bidding drawings, specifications and bill of quantities.

# A2 Specifications

#### 1 STRUCTURAL TIMBER

## 1.1. Timber Generally

All timbers shall be suitable for the purpose for which it is intended and is to be well and thoroughly seasoned, sound, and free from sap, shakes, large, lose or dead knots, cracks, decay, live insect attacks or other defects.

Timbers are to be straight and true and any warped or twisted timbers shall be rejected. Timbers are to be sawn square and shall hold the full sizes specified. All timbers are to be in one piece.

All timbers used in the works unless otherwise specified shall be as follows: For constructional work refer to Structural Timber Specifications and Engineer's Drawings.

Treatment to timber shall be in accordance to clause 3.12.

In all cases samples of the timber for use in the building shall be submitted to the Engineer for approval prior to use.

#### 1.2. Preparation of Timber

The preparation of the timber shall commence simultaneously with the timber beginning of the work generally and shall proceed continuously until the whole of the woodwork is prepared and stacked on the site, and properly protected from the weather.

#### 1.3. Constructional Timber

All constructional timber shall be properly jointed and framed together timber with dowels, bolts or spiked as indicated on the drawings.

## 1.4. Replacement of Timber

Should any of the timber warp, shrink, wind or fly to any appreciable defective timber extent within 6 months of completion of the works, the same shall be removed and new fixed in its place at the contractor's sole expense together with all other work that may be affected.

## 1.5. Stability during construction

The Contractor shall be required to provide temporary supports to walls, panels and piers during construction. Where temporary supports are required, they shall remain in position until the member is permanently restrained.

# 1.6. Workmanship

All carpentry shall be executed with workmanship of the best quality. All carpenter's work shall be left with sawn surface except where specified to be wrot.

All carpenter's work shall be accurately set out and in strict accordance with the drawings and shall be framed together and securely fixed in the best possible manner with properly made joints. Provide all brads, nails, screws etc. as necessary and as directed and approved. All timber shall be as long as possible and practicable, in order to eliminate joints.

Actual dimensions of scantlings for carpentry shall not vary from the specified dimensions by more than 3 mm in deficiency or excess.

All joinery work shall be executed with workmanship of the best quality in strict accordance with the detailed drawings.

All joiner's work shall be accurately set out on boards to full size for information and guidance of artisans before commencing the respective work. All joints, ironwork and other work connected therewith fully declinated which said setting out will be required to be submitted to the Architect and approved before such respective works are commenced. All mouldings shall be accurately and truly run and all work planned and finished to the approval of the Architect. All arises to be slightly rounded.

Should any of the joinery work shrink, warp, wind or develop other defects within six months after the completion of the works, the same will be removed and now fixed in its place, together with all other work which may be affected thereby, at the contractor's cost and expense.

All plugs described as fixing for joinery etc. unless otherwise stated shall be formed by raw plastic Phil plug screw fix or other approved patent material. No wood plugs shall be used.

Any fixed joinery which in the opinion of the Engineer is liable to become bruised or damaged in any way shall be properly cased and protected by the contractor until the completion of the works.

#### 1.7. Floor Protection

All timber bearded floors to be protected with sawdust after laying. The sawdust to be cleared away on completion.

#### 1.8. Joinery work

All joiner's work generally to be cast and framed together as soon as is generally practicable after the commencement of the building, but shall not be wedged or glued until the building is ready for fixing same.

All work to be properly tenoned, shouldered, wedged, pinned, bradded etc... as directed by and to the satisfaction of the Architect and all properly glued up with best quality approved glue.

Oval or round brads or nails shall be used for fixing on face work, heads properly punched in and the holes filled with putty or as otherwise described.

#### 1.9. Finish to Timber

All exposed faces of woodwork shall be wrot, which shall mean bringing up the surface after planning with sand paper to a smooth satin-like finish.

# 1.10. Strength Classes

Timber used shall comply to BS EN 338: 2003 which are defined as C14 to C50 (Coniferous Soft Woods) and D18 to D70(Deciduous Hard Woods).

# 1.11. Grading

Strength grading shall either be visually or mechanically graded to the requirements of BS EN 14081-1: 2005.

#### 1.12. Preservation and Treatment

No timbers, whether permanent or temporary, which are to show evidence of being, or have been, infected with borer or any other insects are not to be permitted on site, and such timbers are to be removed and replaced.

Timber should be stored in a dry, well-ventilated place and protected from external weather conditions. Stacking of timber should be in such a manner as to prevent distortion.

Where described as treated, timber shall be pressure impregnated with Tanalith preservative to a dry salt retention of 5.3 kg of preservative per cubic meter of timber. Timber to be treated shall be machined down to its final dimensions before treatment.

Pressure impregnation shall be carried out in accordance with the preservative manufacturer's recommendations and the recommendations in BS 4072 and BS 5268.

After pressure impregnation the timber shall be dried to the moisture content specified hereinafter. All surfaces of timber which are cut or machined after impregnation shall be treated with preservative as recommended by the manufacturer of the preservative used for the impregnation.

A certificate of treatment from the local/foreign supplier must be submitted for the finished size timber as per dimensions specified on drawings.

Any metal used to fix or fix to timber which has been treated with preservative shall be compatible with the preservative or be treated so as not to corrode under any conditions.

Adhesives used to fix or fix to timber which has been treated with preservative shall be compatible with the preservatives in accordance with the recommendations of the adhesive and preservative manufacturer's recommendations.

All exposed faces to woodwork shall be wrot, which shall mean bringing up the surface after planning with sand paper to a smooth satin like finish.

#### **1.13.** Sizes

Standard sizes of softwood and hardwood shall comply with BS EN 1313-1: 1997 and BS EN 1313-2: 1999. Round timber

#### 1.14. Tolerance

The maximum permitted reduction from target sawn sizes of softwoods and hardwoods by planning two opposite faces shall conform to 1313-1: 1997 and BS EN 1313-2: 1999 except where specified as "(f)" or "(f sizes)" in which case the timbers must hold the full size specified.

Reasonable tolerance shall be provided at all connections between joinery works and the building carcass, whether of masonry or frame construction, so that any irregularities, settlements or other movements shall be adequately compensated.

#### 1.15. Moisture Content

All timber shall be kiln dried generally to moisture content of 12%.

Moisture content for structural timber at the time of delivery onsite shall normally be within  $\pm$  3% of the above moisture content.

The moisture content of the timber members after assembly on site is to match the normal moisture content which the timber is likely to attain in service.

# 1.16. Prices of Timber works

The Contractor is to include in his prices of all members for; fitted ends, mitres, housings, returned ends, etc... and for short-lengths not exceeding 300mm; Prices to also include where applicable for all connections namely mortise and tenon, steel plates, welding, drilling, bolts, provision of proper scarf joints etc... forming part of the structural assembly, wood plugs, approved fillers, glues, handling, work at all heights (inclusive of scaffolding), use of props or any

temporary supports where required, application of timber preservative etc... and the like and making good in all trades on completion.

#### 2 GLAZIER

# 2.1 Quality of Glass

All the glass to be of the best quality obtained free from all defects and imperfections and shall be to the approval of the Architect/Engineer.

- 2.2 Windows and Doors Glaze all windows and doors in 4 mm thick clear sheet glass unless specified otherwise.
- 2.3 Translucent glass Windows requiring obscure vision shall be glazed with translucent glass of an approved texture or pattern, the thickness to be not less than that mentioned above unless specified otherwise.
- 2.4 Putty Putty for glazing to wood shall be made of pure whiting and raw linseed oil and to be used fresh. Putty for glazing to metal shall be steel sash putty of approved manufacture. All putty shall be delivered on site in the original manufacturer's sealed cans or drums and used direct there from, with the addition only of pure linseed oil if necessary. No mineral or other oils shall be used in the putties except genuine linseed oil. The rebates of metal window shall be painted one coat before puttying.
- 2.5 Glazing All glass to be cut accurately in one piece, to fit easily into their rebates and to be well puttied, back puttied and secured with springs in the case of fixing to wood or with metal clips in the case of metal. Care must be taken to ensure that the putty does not show beyond the sight lines of panes and that the putty is neatly cut off internally and neatly splayed off externally all metres and angles left clear and sharp.
- 2.6 Glass blades for Louver Window Blades for louver windows shall be 6 mm thick glass of selected glazing quality Grade 'A' to B.S. 952 and of approved manufacture. The two long edges of the blades shall be flat smooth polished with no sharp arises and the two others clean cut. The contractor shall, when requested to do so, produce certificates of proof of manufacture and quality of the glass blades be proposed to use.
- 2.7 . Glazing work at completion All glass broken, cracked or scratched during the progress of the works to be reinstated at the sole cost of the contractor and all glazing to be left clean and perfect at the completion of the contract

#### 3 PAINTER AND DECORATOR

#### 3.1 Generally

All work shall be carried out in strict accordance with schedule of colours to be obtained from the Architect/Engineer. Samples of colours if requested by the Architect/Engineer shall be painted on the walls 1.00m x 1.00m square and approval obtained from the Architect/Engineer before proceeding with the work.

3.2 Materials, Paint, Varnishes, etc.

All oil paints, emulsion paints, varnish and other materials shall be of an approved manufacture and shall be used strictly in accordance with the manufacturers' printed instructions, the Contractor will only be allowed to use materials which are brought to the site in sealed cans not exceeding one gallon capacity, bearing the name of the manufacturer and properly labelled as to quality. Exterior quality paints only shall be used, both internally and externally. All cans of paint must be kept well stirred before and during use. The only addition to the paint that will be allowed shall be approved pure turpentine and this shall be added only in accordance with the Architect's instructions. All coats of paint applied over each other shall be from the same manufacturer and the type recommended by the manufacture. Well before commencing the painting work the contractor shall submit to the Architect/Engineer for approval a list of all the brands of paint and finishing including the necessary primers and undercoats he intends to use and immediately upon being so approved orders shall be placed and total requirements obtained for the works. Once

approved no other brand of materials shall be used without the express permission of the Architect/Engineer in writing.

# 3.3 Preparation of surfaces

All surfaces to be painted shall be thoroughly cleaned down and surfaces of wood to be sandpapered and to be twice knotted and stopped before applying the priming coat which shall be regarded as additional to the undercoat. All surfaces of ironwork to be thoroughly cleaned of all scale, and every particle of rust, dirt or grease removed by scrapers' and wire brushes, or other approved method. Galvanized, sheradised or zinc sprayed metal to be painted shall be treated with mordant solution. Copper pipes specified to be painted shall be rubbed down with coarse emery, cleaned with a solution of one part acetone to two parts of benzel and left to dry.

#### 3.4 Wood Preservative

Treat all timber built in or in contact with walling and concrete with 2 coats of approved of wood preservative.

#### 3.5 Galvanised metal surfaces

Clean down, treat with degreasing solution, prime with yellow chromate or other approved primer, and paint one undercoat and two gloss finishing coat oil paint.

#### 3.6 Ironwork

Clean down, removing every trace of rust and paint 1 coat of red lead primer, 1 coat of undercoat and two gloss finished coat.

#### 3.7 . Rendered Surfaces

Brush down to remove dirt and dust, prime with alkali resistant primer as specified by the suppliers of the emulsion paint to be used and paint three coats of approved plastic emulsion paint (external quality) both internally and externally strictly in accordance with the manufacturers' instructions. The walls are not to be pumiced down.

## 3.8 Cleaning on completion

All floors to be twice washed, all marks of paint to be sponged off, windows cleaned the work generally to be touched up after all the other trades are finished and the whole of the building left clean and perfect on completion to the satisfaction of the Architect/Engineer.

# **Specifications for Electrical Works**

# 1.0 Scope of works

The scope of works under the present contract shall include but shall not be limited to the following:-

- a) Removal of existing electrical installations
- b) Supply, install, test and commission of distribution boards, & accessories.
- c) Supply, install, test and commission of lighting fittings including aluminium power track & accessories.
- d) Supply, install, test and commission of L.T. cables in trunking/conduits.
- e) Supply, install, test and commission of Earthing System.
- f) Supply, install, test and commission of Fire Alarm System.
- g) Supply, install, test and commission of switches, double pole switches, sockets, ceiling/wall fans, telephone sockets, and hand dryer
- h) Supply, install, test and commission of air conditioning units.
- i) Any associated civil works

# 2.0 Instruction to tenderers

#### 2.1 Makes

Equipment/materials for this project shall be as per specifications/schedules or as indicated on the drawings. Tenderers shall specify clearly the makes of various equipment/materials they propose to use. These shall be accompanied by documentation (preferably in original) to enable the Director (or designated representative) of Energy Services Division (ESD) to approve or otherwise.

The decision of the Director, Energy Services Division (or representative) shall always be final and no materials/equipment shall be supplied/installed in the project without his approval or that of his representative.

#### 2.2 Manner of Execution

The works shall be executed in the manner set out in the specifications or where not set out, to the satisfaction of the ESD Engineer and all reasonable variations on site shall be carried out in accordance with such directives as the Engineer may give.

Electrical installations shall be carried out to good standards of workmanship and all equipment, materials and fittings shall be new and according to specifications. Where no details have been

provided, products shall be manufactured to the British Standards applicable to the particular product.

# 3.0 Technical Specifications

#### 3.1 Electrical Installations

This section provides a brief description of the electrical works related to this contract. The selected Electrical Contractor shall carry out the works to the full satisfaction of the Director of ESD or his representatives.

# 3.2 Regulations

The installations shall conform in all respects to the Institution of Electrical Engineers (U.K.), 18th Edition Wiring Regulations (BS 7671-2018) with subsequent amendments.

# 3.3 Electrical Supply

The new installation shall be taken from an existing single-phase 230V, 50Hz power supply.

#### 3.4 Electrical Panels

The distribution board (DB) shall be to IP 55, IK10 and shall be of fibre glass reinforced light colour polyester resin heat polymerised self extinguishing type with hinged lockable door. The panel shall be big enough to accommodate incoming and outgoing feeders and the following:

- 1. MCBs and RCBOs as per schematic layouts.
- 2. Copper Earth Bar Terminal with suitable number of outlets & sizes.
- 3. All accessories to make a complete panel.

Distribution boards shall be wall mounting. All circuits and instrument in the board shall be properly labelled with perspex and danger notices fixed on panels. Plasticised schematic layout shall be fixed in respective Distribution Boards.

Panels shall be located as shown in drawings and shall be properly earthed. 30% of spare capacity shall be allowed. There shall be ample space in the panel to allow for easy access when required for manual work. All cable ends shall be properly terminated with starfix type ferrules.

# 3.5 Miniature Circuit Breaker (MCB), and Residual Current Breaker with Overload (RCBO)

# 3.5.1 Miniature Circuit Breakers (MCB)

MCB's shall be of reputed make and break type with trip free mechanism to IEC 60898. They shall be equipped with non-adjustable thermal overload and magnetic short circuit release with a minimum breaking capacity of 10 kA.

## 3.5.2 Residual Current Breaker with Overload (RCBO)

RCBO's shall be of the current type to IEC EN 61009. It should be as rated in the schematic with 30 mA sensitivity and with a minimum breaking capacity of 6 kA. The RCBO should be provided in one and the same unit.

# 3.5.3 Voltage Surge Protector (VSP)

The Voltage Surge Protectors shall be installed to protect the downstream equipment against transient overvoltages and shall be as per the below specifications.

No	Description	Requirement
1.	Number of Poles	As indicated on schematics
2.	Туре	2
3.	Maximum Discharge Current (Imax)	20 kA/pole
4.	Nominal Discharge Current (In)	5 kA/pole
5.	Protection Level (Up)	1.2 kV at 5 kA
6.	Max. Continuous Operating Voltage (Uc)	320 V
7.	<b>Protection Mode</b>	L(N)-PE
8.	Mains Supply	Suitable for 230/400 V (50 Hz)
9.	Earthing System	Suitable for TT earthing system.
10.	Standards	IEC 61643-11

#### 3.6 Type of Installations

All wiring inside the plywood ceiling shall be enclosed in Isogris flexible conduit. Flexible conduit shall be of adequate dimension in order to satisfy cable space factor and shall be securely fixed. If required, PVC conduit shall be used inside the false ceiling for a secure and neat installation.

For Drop-in from ceiling (e.g. for lighting switches), the installation shall be of concealed type using flexible conduits in the walls. White PVC conduit shall only be used in areas where there is no plywood wall.

Cut ends of conduits shall have no burrs left to avoid damage to the insulation of conductors while pulling them through. Conduits shall be installed from point to point using suitable drawing-in or loop-in boxes. Joints shall not be allowed. The laying of conduits shall be such that any condensation inside the conduit is drained out.

Saddles shall be placed at adequate intervals and bends to be used if required. All the conduit works shall be neatly carried out.

# 3.7 Cabling & Wiring Works

Generally, all cables shall be multicore flexible PVC insulated 600V grade copper conductor manufactured in accordance with BS 6004. Main and submain cables shall be generally of 1 kV grade conductor of high conductivity copper wires insulated with PVC.

Cables shall comply with relevant BS and Mauritian Standards. Conduit of adequate dimension shall be used where necessary in order to satisfy cable space factor.

Colour code of cable shall be as follows:

Live Brown
Neutral Blue

Earthing Yellow/green

# 3.8 Lighting Installations

All luminaires shall comply with BS 4533 supplied and installed complete with their lamps as specified. Luminaires shall be in accordance with the schedule given below:

Type	Description
A	Spot light fixed on aluminium power track system
	Spot light
	Operating voltage: 230V, 50Hz
	Body and heat sink to be in aluminium
	• Light source: 10W LED,
	Colour temperature: 3000K
	Minimum useful life: 25,000 hours
	• Dimming : 10% to 100%
	<ul> <li>Provided with interchangeable lenses 10°-40°</li> </ul>
	Colour: Black
	Power track system
	To be in solid aluminium

Type	Description
	• Each circuit to be rated 250 V AC, 16A
	• To be available in modular lengths of 1m and 2m
	• To be complete with accessories such as power supply connections, adaptors, flexible
	coupler, in-line coupler
	• To be suspended about 1.0 m below ceiling by means of steel cables (complete with
	all accessories). The fixation of the steel cables to the ceiling shall be to the
	Engineer's approval.
	• Colour: Black
В	40W, LED Panel Light, 600mm x 600mm
	• IP40
	Colour temperature minimum 6000 K
	Useful minimum flux of 4500 lumens
	• White finish
	• CRI: >80
С	LED Bulkhead (Circular type) with the following characteristics:
	• IP65, IK09
	Robust die-cast Aluminium construction
	• Power: 9 W
	• Luminous efficacy of at least 95 lm/W
	• CRI≥80
	• Colour Temperature: >4500K
	• Min. Lifetime: 20,000 hours
D	LED waterproof fitting with the following characteristics:
	Slim Rectangular Fitting
	Tempered Glass Diffuser and LED Driver
	• IP 65
	• About 10 W /20 W
	Colour Temperature Minimum 4000K
Е	Emergency light units which shall be of self-contained type and shall have the following
	characteristics:
	• System Mode: Non- Maintained Type – AC 230V/50Hz
	• Emergency Duration: 3hrs

Type	Description
	Light Source: High intensity 3W white LED
	Lamp Output: 140-200 Lumen
	Battery: Sealed Rechargeable Nickel-Cadmium, Inclusive of battery Charger &
	Charging Monitor LED
	Degree of Protection: IP 42 Class II
	Accessories: Suitable for ceiling and wall mounted
	Appearance: Attractive, curved, low profile
F	LED Floodlight with the following characteristics:
	Die-cast shell/Aluminium alloy body
	Strengthened safety glass
	• Safety rating: IP65
	• Light angle: 25 to 120°
	• Power: 50W
	• Voltage rating: 230V
	With motion sensor
	• Efficiency: at least 80%, 80lm/W
G	LED Indoor Down Light with the following characteristics
	LED ceiling surface downlight
	With diffuser
	Rust and corrosion-free body
	Power : About 8 W LED

All luminaires shall be manufactured to British or European Standards.

# 3.9 Switches and sockets

Switches (10 A rated) and sockets (13 A rated) shall be to relevant British or European standards (BS 3676). They shall be flush mounted in suitable boxes. The number of gang and ways shall be as indicated in the drawings. The lighting switches and sockets shall be fixed at 1500mm and 450mm respectively above the finished floor level or as instructed. They shall be of reputed make. All sockets should be with neon indicators.

All outdoor electrical fittings and accessories shall be weatherproof and vandal proof.

#### 3.10 Wall fans

- Single phase operation, 230 V, 50 Hz
- Blade diameter to be 18 inches.
- With complete metal base and casing
- To British Standard and European Standards
- Three speed operation with integral control and pull cord switch
- Fan motor shall be aluminium capacitor motor
- Paint finish to be in brilliant black
- Complete with all accessories including control switches

One socket (one gang) with LED indicator shall be located near each wall fan. The tenderer has to include the latter in its offer. All wall fans shall be fixed securely with fischer.

# 3.11 Ceiling Fans

- Single phase operation, 230 V, 50 Hz.
- To British Standard and/or European Standards.
- White finished blades.
- Blade span to be minimum 1200mm.
- Down rod to be of heavy duty type and changeable. Contractor to ensure optimum down rod length is used.
- Three Speed operation and ON/OFF lighting control with wall mounted controller.
- Complete with all accessories.
- Maximum noise level of 50dBA at 1m on high speed.
- Efficiency rating (CFM/Watt) greater than 80.

All ceiling fans shall be fixed securely as per manufacturer's instructions and shall not wobble at high speed.

#### 3.12 Hand Driers

Hand Driers shall be installed to the following specifications and supplied through a Double Pole switch with neon/led indicator:

- Rating 1.5 kW, 230 V ac, 50 Hz complete with all accessories.
- Fan: highly efficient and low noise fan
- Automatic 'no touch' start and stop

- Drying cycle: 30
- Safety features
  - (i) Fitted with safety devices to protect heating unit and fan motor against overloading
  - (ii) Fitted with 40 s timer to prevent the drier running continuously in the event of the sensors becoming obstructed
  - (iii) Incorporating hair/face drying facility
  - (iv) Outer casing: plastic

#### 3.13 Air conditioning units

#### Split Wall Mounted type

The Air Conditioning Units shall be to the specifications given below.

#### 3.13.1 Air Conditioner Characteristics:

#### **Indoor Unit:**

- ♦ Dc-inverter type
- Wall mounted type.
- ♦ Horizontal/vertical air flow.
- ♦ Low noise level at high speed (less than 49 dBA at 1m from the unit).
- ♦ Automatic air deflection.
- ♦ Variable fan speed and temperature control.
- wireless remote control with LCD temperature display and holder.
- ♦ Units should have a cooling **E.E.R** (W/W) greater than 3.2
- ♦ Healthy air filter system complete with ionizer, cold catalyst filter and Bio Filter or their equivalent.
- ♦ Slim, compact and of elegant design.

#### **Outdoor Unit:**

- ◆ Shall be suitable for tropical climates.
- ♦ Shall be weatherproof, cyclone proof.
- Rotary type compressor with five years guarantee.

#### 3.13.2 General Notes

- 1. The price quoted shall include supply, installation (inclusive of civil works) and commissioning of the air conditioning unit.
- 2. Original leaflet containing technical data shall be attached as proof of compliance with specifications. Make and country of origin of the unit quoted shall be specified as well as the country of final assembly.

- 3. The compressor of the air conditioners shall be guaranteed for a period of at least 5 years and all other parts for a period of at least 1 year. This guarantee period shall be effective only as from the date of successful commissioning of the air conditioners.
- 4. The split type air conditioners shall be equipped with wireless remote controls by means of which the air conditioners may be switched on and off, the temperature and fan speed may be controlled and from which one may read the room/office temperature via an LCD display.
- 5. Any supports, mounting brackets etc... (To be hot dipped galvanized) shall be supplied and installed by the successful tenderer.
- 6. The position of the indoor units may be subject to change at the moment of installation and this shall be considered by the tenderer when quoting. Note that no variation will be accepted upon this item after award of the contract.
- 7. The outdoor units shall be installed on galvanized brackets to be fixed on the wall.
- 8. Any civil/masonry works (e.g. drilling of hole in order to pass the pipe or ductwork, modifications to window panes/frames/metal work as and if deemed necessary by tenderer) associated with the installation of the air conditioner shall be undertaken by the tenderer. All openings shall be properly sealed to avoid leakage of cool air.
- 9. The successful tenderer shall have to take all the necessary precautions so as not to damage the flooring, painted block work during execution of the works.
- 10. Successful tenderer shall have to make their own arrangements for scaffolding and any other materials required for the installations.
- 11. The air conditioners shall be provided with a suitable drain pipe with sufficient slope for perfect drain. The drain pipe shall be leak proof and shall be securely fixed as and where necessary up to 50mm to soil level.
- 12. All piping (refrigerant and drain) shall be enclosed within white PVC trunking of suitable dimensions indoors and outdoors. Note that the cover of same shall be securely fixed so as not to be blown away by cyclonic gusts. Moreover, all joints shall be suitably sealed by means of silicon rubber.
- 13. The air conditioner shall be equipped with appropriate valves along the refrigerant pipes so as to allow isolating and separating the indoor unit from the outdoor unit without any loss of refrigerant. Tenderers are hereby requested to indicate clearly in their quotations whether or not the air conditioner they will be proposing will be equipped with the said valves or some other device which will achieve the same function.
- 14. Any opening shall be properly sealed in order to prevent leakage of cool air and ingress of rain water especially during cyclonic periods.

- 15. The tenderer shall submit as part of the contract, upon completion of works, **two copies** of the operations and maintenance manual inclusive of an exploded diagram of the air conditioning plant showing the different parts and associated part numbers.
- 16. The tenderer shall test and commission the whole works in the presence of the Client and the Energy Services Division or their representatives. During testing, the sound pressure level shall be measured. Two copies of test certificates shall be submitted together with the one-year guarantee certificates.
- 17. The commissioning of the air conditioning installation works shall be deemed complete and successful only when all the above have been satisfied and completed.
- 18. The tenderer shall provide free servicing on a quarterly basis during the one-year guarantee period. Such servicing shall consist of cleaning of filters and checking the performance of the units. Quarterly reports shall have to be submitted to the Director, Energy Services Division and representatives of client.

#### 3.14 Fire Alarm System

In this project, there should be a standalone system which shall be of conventional type. The fire alarm panel shall be of at least 4-zone. The Fire Alarm System of conventional type shall be made up as follows:-

- 1. Individual detection and alarm system
- 2. A combination of optical smoke detectors, Fixed High Temperature Heat detectors and Manual Call Points to give alarms.
- 3. The detector or call point from which an alarm or fault originators shall be identifiable.
- 4. Sounders to give audible alerts.

The fire alarm system shall be as per layouts drawings.

#### 3.14.1 Main control and indicating panel

The main panel shall comply to BS 5839

It shall consist of a 4 Zone Version panel with the following features:

- 1. Individual zone alarm relays
- 2. Individual zone isolation
- 3. One man walk test facility
- 4. Monitored outputs
- 5. Integral power supply to provide at least 24 hrs power in case of mains failure (Maintenance free batteries lead acid type and charger)
- 6. Surface mounting
- 7. Integral call point and sounder

#### 8. Micro processor based modular design

The main panel shall have the following indications:

Fire Alarm Maintenance alarm, Device fault, System faulty, Auto reset, Test mode, Supply fault, etc.

The main panel shall be designated so as to receive alarm signals and display on a mimic diagram where the signals emanated.

#### 3.14.2 Manual Call Points

- To be compatible to BS 5839 (or to relevant European Standards) and shall be of plastic cover.
   Push should be of membrane type with polycarbonate cover
- Shall have LED indication
- Recessed/surface mounting

#### 3.14.3 Sounders (Low intensity)

- a) Shall be to IP 55
- b) Sound output: About 100 dBA at 1m or 5dBA above background noise with adjustable feature
- c) Two distinct sounds possible for "Alert" & "Evacuate"

#### 3.14.4 Point and Volumetric Detectors

#### (a) **Optical Smoke Detectors**

- Shall be to BS 5445 Part 7 or to relevant European Standards
- Pulse light source or light scatter principles

#### (b) Fixed High Temperature Heat Detector

- shall be to BS 5445 Part 8 (or to relevant European Standards)
- operating point set at about 75° C (fixed temperature)
- Electric thermistor detector element

#### 3.14.5 Power Supply

The battery unit shall be capable to sustaining the normal load of the alarm system for a period of at least 24 hours, followed by the load of all sounders for a period of 45 minutes. It shall include the following features:

- 1. have enough space for batteries
- 2. protection for battery/regulator circuits
- 3. reverse polarity protection
- 4. wall mounting
- 5. automatic battery load set
- 6. sealed lead acid batteries

The power supply shall also incorporate the appropriate charging circuit.

#### **3.14.6** Cabling

This shall consist of fire resistant cables to be run into flexible flameproof conduits (laid on cable tray as per layouts)

#### 3.14.7 Portable Fire Extinguishers

#### 3.14.7.1 Dry powder (To provide 2 Nos)

Dry powder fire extinguishers shall be of ABC type, of capacity 4.0 kg and at a working pressure of at least 14 bars.

The cylinders shall be of light weight corrosion resistant design. The carrying handle shall be one metre off the floor level.

#### 3.14.7.2 Carbon dioxide gas (To provide 2 Nos)

Carbon dioxide gas fire extinguishers shall be at a working pressure of at least 56 bars and contain 2.0 kg of carbon dioxide.

The cylinders shall be of light weight corrosion resistant design. The cylinders shall be of robust Aluminium construction. The carrying handle shall be one metre off the floor level.

The exact location for the portable fire extinguishers will be finalised on site.

#### 3.15 Telephone installations

Telephone cabling shall run in flexible conduits from each telephone point to feed the main junction box in the veranda. Telephone RJ 11 sockets shall be provided at all the required locations. In the respective offices, the sockets shall be next to each other. All telephone points and the terminals at the main distribution point shall be properly labelled for easy identification. The labelling scheme shall be approved by the client's engineer.

A cabinet/data rack of sufficient size shall be provided to house the telephone junction box and future use for data network.

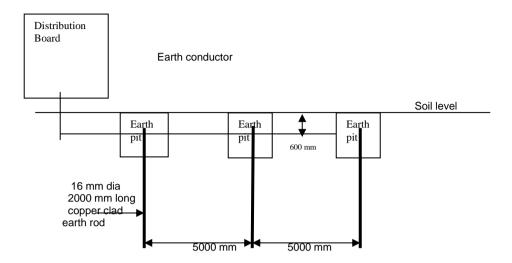
The contractor shall allow for telephone cabling, sockets (RJ 11 to BS), main junction box, cabinet/data rack and conduit only.

#### 3.16 Labels and Danger Notices

All main circuits and subcircuits shall be clearly and neatly labelled for quick circuits identification. A schematic layout for the distribution shall be displayed in the Distribution Board. Suitable warning notices in red lettering on white background shall be provided on each distribution boards. Label shall bear identifications on drawings and voltage also.

Suitable "Danger" plates shall be securely affixed on the distribution boards and mounted in prominent position. Each danger notice shall be fabricated in enamel sheet steel. Symbols shall be in red on white background and shall be to British Standard.

#### 3.17 Earthing System

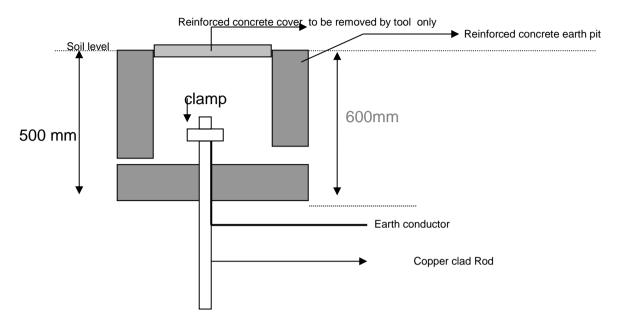


**Note**: The No. of earth rods shown is indicative only. These shall be increased until the desired Earth Resistance is obtained.

The new distribution board shall be provided with a local earthing system. This shall comprise of at least 3 copper-clad steel earth rods/plates with dia 16mm buried to a depth of 2400mm at 5m intervals as shown in the diagrams. The interconnecting copper cable between the earth terminal of the distribution board and the earth rods shall be 16 mm2. The earth loop impedance at any point of the installation shall not exceed two ohms.

Concrete inspection pits c/w hot-dipped galvanised lids shall be provided, subject to Energy Services Division approval in order to facilitate inspection and testing.

## Earth pit



#### 3.18 Testing & commissioning

Upon completion of the installation or part of it, the Contractor shall test and commission plant, equipment and integral systems, in stages if required, to ensure that it is intrinsically safe, in proper working order and capable of performing its functions in accordance with the specifications and to the satisfaction of the ESD.

Tests shall be carried out in the presence of the Director, ESD or his representative on all sections of the installation work and three duly signed certificates of test results shall be submitted to the Engineer.

All test certificates and as fitted drawings shall be approved and signed by a Registered Professional Electrical Engineer, registered with the Council of Professional Engineers of Mauritius, before submission to the Client.

The following tests shall be performed:

- (a) Earth loop impedance test
- (b) Earth Resistance test
- (c) Insulation resistance on main and sub-main cables prior to connection
- (d) Polarity test
- (e) Operation of protective devices
- (f) Continuity test

If the installation fails any of the above tests, then any previous tests already carried out and affected by the remedial work required must be repeated. Arrangements for testing including supply of test equipment shall be the responsibility of the Contractor.

#### 3.19 Guarantee

The Contractor shall guarantee all work for a period of twelve months as from the date of successful commissioning. In the event of a defect arising within this period, which in the opinion of the Engineer is due to faulty workmanship or materials, the Contractor shall, at his own expenses make good such defects where instructed to do so, to the satisfaction of the Engineer.

The repairs shall be carried out within 48 hours of the express demand of the ESD.

#### 3.20 Drawings

The bidder shall allow in his offer for the submission of a full set of *shop drawings* for the engineer's approval prior to order of materials and start of works.

The tenderer shall submit upon completion of the works, three copies of as "fitted diagrams" consisting of the following:

- (i) the electrical installations and protective gears
- (ii) schematic layout of circuits
- (iii) location of Distribution Boards & cable routes
- (iv) Earthing System
- (v) Completion and test certificates

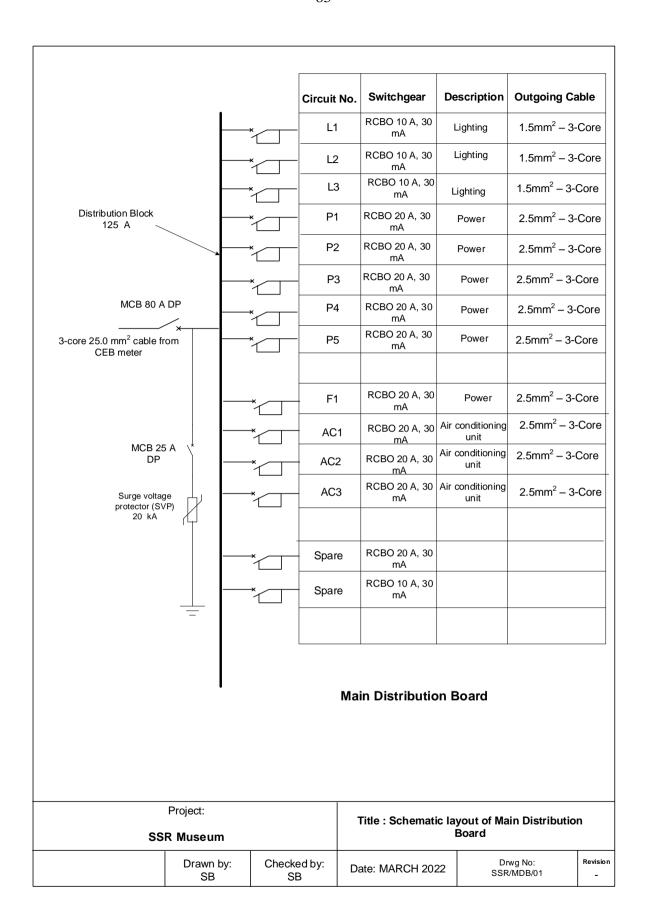
to the Director of the ESD or his representative.

## **SSR Museum**

## **Schedule of materials**

Item No	Description	Proposed Make and Model	Country of origin
1	Distribution board		
2	Switchgear		
3	Power track for Type A luminaire		
4	Luminaire Type A		
5	Luminaire Type B		
6	Luminaire Type C		
7	Luminaire Type D		
8	Luminaire Type E		
9	Luminaire Type F		
10	Luminaire Type G		
11	Lighting switches		
12	Lighting Dimmers		
13	Flexible/PVC conduit		
14	Power sockets		
15	Telephone sockets		
16	Wall Fans		
17	Ceiling fans		
18	Air conditioning unit		
19	Hand dryer		

Item No	Description	Proposed Make and Model	Country of origin
20	Fire Alarm Panel		
21	Smoke detectors		
22	Heat Detectors		
23	Manual call point		
24	Sounders		
25	Fire extinguishers		
26	Earthing system		



## **B. DRAWINGS**

## Architectural Drawings

Existing Ground Floor Layout (Sheet 1)	<i>RFW/01</i>
Proposed Ground Floor Layout (Sheet 1)	<i>RFW/02</i>
Existing Ground Floor Layout (Sheet 2)	<i>RFW/03</i>
Proposed Ground Floor Layout (Sheet 2)	<i>RFW/04</i>
Existing Roof Layout	<i>RFW/05</i>
Proposed Roof Layout	<i>RFW/06</i>
Elevation 1 (Existing)	<i>RFW/07</i>
Elevation 1 (Proposed)	<i>RFW/08</i>
Elevation 2 (Existing)	<i>RFW/09</i>
Elevation 2 (Proposed)	<i>RFW/10</i>
Elevation 3 (Existing)	<i>RFW/11</i>
Elevation 3 (Proposed)	<i>RFW/12</i>
Elevation 4 (Existing)	<i>RFW/13</i>
Elevation 4 (Proposed)	<i>RFW/14</i>
Schedule of Existing Openings (Sheet 1)	<i>RFW/15</i>
Schedule of Existing Openings (Sheet 2)	<i>RFW/16</i>
Wooden Worktop details	<i>RFW/17</i>
Flashing Details	<i>RFW/18</i>

## Structural Drawings

Proposed Ground Floor Layout	RFW/ST01
Connection Details (Sheet 1)	RFW/ST02
Connection Details (Sheet 2)	RFW/ST03
Truss Layout and Sections	RFW/ST04
Structural Notes	RFW/ST05
Demolition/Renovation Notes	RFW/ST06

## **Electrical Drawings**

Power and Telephone Layout	RFW/ELEC01
Lighting Layout	RFW/ELEC02
Ventilation Layout	RFW/ELEC03
Fire Alarm Layout	RFW/ELEC04

# Section IV: General Conditions of Contract and Particular Conditions Of Contract

Any resulting contract shall be placed by means of a Letter of Acceptance and shall be subject to the General Conditions of Contract (GCC), (Ref: W/GCC10/12-21) for the Procurement of Works (available on website *ppo.govmu.org*) except where modified by the Special Conditions below.

## PARTICULAR CONDITIONS OF CONTRACT

Procurement Reference Number: MMC/OAB/1 of 2021-22

The clause numbers given in the first column correspond to the relevant clause number of the General Conditions of Contract.

GCC Clause Reference	Particular Conditions	
Employer	The Employer is the Mauritius Museum Council	
GCC 1.1 (r)		
Intended Completion Date	The Intended Completion Date is specified to be 180 days from the commencement date	
GCC 1.1 (v)		
Project Manager	The Project Manager is:	
GCC 1.1(y)	Project Coordinator of the Ministry of Arts and Cultural Heritage	
Site GCC 1.1(aa)	The Site is located at Sir Seewoosagur Ramgoolam Museum, Plaine Verte	
Start Date GCC 1.1(dd)	The Start Date shall be the commencement date. The commencement date shall be set following submission of the required insurance covers under GCC Clause 13.1.	
The Works GCC 1.1(hh)	The Project consist of the following:	
	Demolition Works	
	Refurbishment works of the Museum	
	Electrical Works	
	<ul> <li>Other works as more fully described in the specifications, bill of quantities and drawings</li> </ul>	
Language and	The language of the contract is English	
Law GCC 3.1	The law that applies to the Contract is the law of Mauritius.	
Project Manager's	The Project Manager shall obtain specific approval from the Employer before carrying out any of his duties under the Contract which in the	

GCC Clause Reference	Particular Conditions	
Decisions 4.1	Project Manager's opinion will cause the amount finally due under the Contract to exceed the Contract Price or will give entitlement to extension of time. This requirement shall be waived in an emergency affecting safety of personnel or the Works or adjacent property.	
Notices	Any notice shall be sent to the following addresses:	
GCC 6	For the Employer, the address shall be as given below:	
	Mauritius Museums Council Mauritius Institute Building, Chaussée Street, Port Louis	
	and the contact name shall be the <b>Director</b>	
	For the Contractor, the address shall be as given on the first page of the Letter of Acceptance and the contact name shall be	
Insurance GCC 13.1	govers shall be in the joint names of the Contractor and the Employer	
	(d) for personal injury or death:	
	(i) of the Contractor's employees: [The Contractor shall take an adequate insurance cover for its employees for any claim arising in the execution of the works]. Evidences to be produced by Contractor	
	(ii) of other people: This cover shall be for an amount of Rs 10, 000, 000.00 (Ten million rupees), for any one occurrence or a series of occurrences arising	

GCC Clause Reference	Particular Conditions
	out of any one event, for Third Party extended to the Employer and its representatives].
	(e) for loss or damage to materials on-site and for which payment have been included in the Interim Payment Certificate, where applicable.  The Contractor shall choose to take the insurance covers indicated above as separate covers or a combination of the Contractor's All Risks coupled with the Employer's liability and First Loss Burglary, after approval of the Employer. All insurance covers shall be of nil or the minimum possible deductibles at sole expense of the contractor.  The contractor must submit the insurance cover within 14 days after
	issue and acceptance of letter of award and shall be extended to cover for any extension of the intended completion date or to delay by the contractor up to the end of the defects liability period of the works
Intended Completion Date GCC 16.1	The Intended Completion Date for the whole of the Works shall be: 180 days as from the commencement date.
Possession of the Site GCC 20.1	The Site Possession Date shall be the commencement date.
Procedure for Disputes GCC 24	No Adjudicator shall be appointed under the contract and arbitration shall not apply. If any dispute arises between the Employer and the Contractor in connection with or arising out of the Contract, the parties shall seek to resolve any such dispute by amicable agreement. If the parties fail to resolve such dispute by amicable agreement, within 14 days after one party has notified the other in writing of the dispute, then the dispute shall be referred to court by either party.
Program GCC 25.1	The Contractor shall submit for approval a Program for the Works within seven days from the date of the Letter of Acceptance.
GCC 25.3	Program updates shall be required.
Defects Liability Period GCC 33.1	The Defects Liability Period is 6 months
Payment Certificates GCC 39.7	Payment shall be made as per progress of works without payment for materials on site.
Payments GCC 40	The amount certified by the Project Manager shall be paid in full within 28 days of receipt by the Employer of an invoice, supported by:  (a) the payment certificate; and  (b) a certificate of Completion of the Works.
Adverse weather	The following conditions will be considered as adverse weather

GCC Clause Reference	Particular Conditions
Conditions	conditions.
GCC 41.1 (l)	<ul><li>Cyclone warning class above 2;</li><li>Torrential rainfall warning;</li></ul>
	• 50 mm rainfall occurred during a day with data obtained from the nearest station to the site of works
	Official rainfall data from the Meteorological Services of Mauritius has to be submitted to substantiate events of adverse weather conditions.
Price	The Contract is not subject to price adjustment.
Adjustment	
GCC 44.	
Retention	10% of the amount shall be retained from any payment. Half of the
GCC 45.	retention money will be released after formal taking over of the Works and the remaining shall be released after the Defect Liability Period subject to the Contractor making good all defects.
Liquidated Damages	The liquidated damages for the whole of the Works are Rs5, 000.00 per day.
GCC 46.1	The maximum amount of liquidated damages for the whole of the Works is 10 % of the contract amount excluding unused contingency sum and VAT.
Advance Payment GCC 48.1	No advance payment shall be made.
	Devicement of Convite shall be 10 % of the contract value loss
Performance Security	Performance Security shall be 10 % of the contract value less provisional sum and contingency sum and excluding VAT
GCC 49.1	The state of the s
GCC 56.1	"As built" drawings or operating and maintenance manuals are required.
GCC 59.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is: 20%

## **Section V- Contract forms**

## **Performance Security**

Beneficiary:	Name and Address of Mauritius Museum
Date	
PERFORMANCE GU	ARANTEE No.:
called "the Contractor dated with you,	ed that
Furthermore, we unde security is required.	rstand that, according to the conditions of the Contract, a performance
irrevocably undertake in figures (amount in words)] currencies in which t writing accompanied	Contractor, we
issuance of the Defect shall be provided to whichever occurs firs	expire and returned to us not later than twenty- one days from the date of its Liability Certificate, calculated based on a copy of such Certificate which us, or on theday of
	Seal of bank/Insurance Guarantee and
Signature(s)	

## **Letter of Acceptance**

[ on letterhead paper of the Employer]

[date]
To: [ name and address of the Contractor]
Subject: [Notification of Award Contract No]
This is to notify you that your Bid dated [insert date] for execution of the
You are requested to furnish the Performance Security in accordance with the General Conditions of Contract, using for that purpose of the Performance Security Form included in Section V (Contract Forms) of the Bidding Document.
Authorized Signature:
Name and Title of Signatory:
Name of Agency:
Attachments Contract Agreement

Attachment: Contract Agreement

## **Contract Agreement**

[name of		fter "the Employer"), of the one part, and e Contractor"), of the other part:	
.should b	1 •	rks known as [name of the Contract] has accepted a Bid by the Contractor for the the remedying of any defects therein,	
The Empl	loyer and the Contractor agree as follo	ows:	
	this Agreement words and expre	essions shall have the same meanings as are ocuments referred to.	
	ne following documents shall be deen ement. This Agreement shall prevail of	med to form and be read and construed as part of over all other Contract documents.	
(a)	the Letter of Acceptance		
(b)	) the Bid		
(c)	the Addenda Nos [insert adden	da numbers if any]	
(d	the Appendix to the General Condit	ions of Contract	
(e)	the General Conditions of Contract;		
(f)	(f) the Specification		
(g	the Drawings; and		
(h	the completed Schedules,		
indicated	in this Agreement, the Contractor her	be made by the Employer to the Contractor as reby covenants with the Employer to execute the formity in all respects with the provisions of the	
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.			
		to have caused this Agreement to be executed in on the day, month and year indicated above.	
Signed b	oy:	Signed by:	
	and on behalf of the Employer	for and on behalf the Contractor	
	the	in the	
presence	of:	oresence of: Witness, Name, Signature, Address, Date	
11 1111033	, i mino, dignamo, i manoss, Dan	"Tulebo, Italie, Digilature, Ladicos, Date	