



# BILLS OF QUANTITIES

SIR MCCHESENEY GEORGE SECONDARY SCHOOL

VOLUME 1

FOR



MINISTRY OF EDUCATION  
GOVERNMENT OF ANTIGUA & BARBUDA

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**PROCUREMENT DOCUMENTS**

**Bidding Document for  
Procurement of Small Works**

**Procurement of:**

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**ALTERATIONS AND EXTENSION TO  
SIR MCCHESENEY GEORGE SECONDARY SCHOOL  
BARBUDA**

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**Issued on: September 24th, 2017**

***Employer:* MINISTRY OF EDUCATION  
GOVERNMENT OF ANTIGUA & BARBUDA**

**Country: Antigua & Barbuda**

# Preface

This Bidding Document for Procurement of Small Works has been prepared by the Ministry of Education Science and Technology (Government of Antigua and Barbuda) and is based on the Standard Bidding Document for Procurement of Small Works issued by the Caribbean Development Bank, dated May 2013.



This document reflects the structure and the provisions of the Master Document for the Procurement of Small Works, prepared by Multilateral Development Banks and International Financing Institutions, except where specific considerations within the respective institutions have required a change.

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# Standard Bidding Document

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# **PART 1 – Bidding Procedures**

# Section 1 - Instructions to Bidders

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## Section I - Instructions to Bidders

### A. General

1. **Scope of Bid**
  - 1.1 The Employer, as **indicated in Section II, Bid Data Sheet (BDS)**, issues this Bidding Document for the procurement of the Works as specified in Section VI Requirements. The name, identification, and number of lots **provided in the BDS**.
  - 1.2 Unless otherwise stated, throughout this Bidding Document, definitions and interpretations shall be as prescribed in Section VII, General Conditions.
2. **Source of Funds**
  - 2.1 The Recipient of CDB Financing (hereinafter called “Recipient”) **indicated in the BDS** has applied for or received financing (hereinafter called “funds”) from the Caribbean Development Bank (hereinafter called “the Bank”) toward the cost of the project **named in the BDS**. The Recipient intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
  - 2.2 Payments by the Bank will be made only at the request of the Recipient and upon approval by the Bank in accordance with the terms and conditions of the financing agreement between the Recipient and the Bank (hereinafter called the Loan Agreement), and will be subject in all respects to the terms and conditions of that Loan Agreement. No party other than the Recipient shall derive any rights from the Loan Agreement or have any claim to the funds.
3. **Fraud and Corruption**
  - 3.1 The Bank requires that Recipients (including beneficiaries of Bank loans), as well as Bidders, Suppliers, Contractors, and Consultants under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Bank:
    - (a) defines, for the purposes of this provision, the terms set forth below as follows:
      - (i) “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
      - (ii) “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement

process or the execution of a contract;

- (iii) “collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of the Recipient, designed to establish bid prices at artificial, non-competitive levels; and
  - (iv) “coercive practices” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process or affect the execution of a contract;
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;
  - (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Recipient or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Recipient having taken timely and appropriate action satisfactory to the Bank to remedy the situation;
  - (d) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that they have, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract; and
  - (e) will have the right to require that a provision be included in Bidding Documents and in contracts financed by CDB, requiring bidders, suppliers, contractors and consultants to permit the Bank to inspect their accounts and records and other documents relating to the Bid submission and contract performance and to have them audited by auditors appointed by the Bank.

3.2 Furthermore, Bidders shall be aware of the provisions of GCC Sub-Clauses 22.2 and 56.2(h).

4. **Eligible Bidders**
- 4.1 A Bidder may be a natural person, private entity, or government-owned entity — subject to ITB 4.5 — or any combination of such entities supported by a letter of intent to enter into an agreement or under an existing agreement in the form of a joint venture, consortium, or association (JVCA). In the case of a JVCA:
    - (a) unless otherwise specified in the BDS, all partners shall be

jointly and severally liable, and

- (b) the JVCA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVCA during the bidding process and, in the event the JVCA is awarded the Contract, during contract execution.

4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including Related Services.

4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- (a) they have a controlling partner in common; or
- (b) they receive or have received any direct or indirect subsidy from any of them; or
- (c) they have the same legal representative for purposes of this bid; or
- (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which it is involved. However, this does not limit the inclusion of the same subcontractor not otherwise participating as a Bidder, in more than one bid; or
- (f) a Bidder participated as a consultant in the preparation of the Section VI, Requirements that are the subject of the Bid; or
- (g) a Bidder, or any of its affiliates has been hired or is proposed to be hired by the Employer or Recipient for the supervision

of the contract.

- 4.4 A firm that is under a declaration of ineligibility by the Bank at the date of the deadline for bid submission or thereafter, shall be disqualified.
- 4.5 Government-owned entities in an **eligible country** shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under the principles of commercial law, and (iii) are not dependent agencies of an **eligible country**.
- 4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.

Firms shall be excluded if:

- (a) as a matter of law or official regulation, the Recipient's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or related services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Recipient's country prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.

## 5. **Eligible Goods and Services**

- 5.1 All goods and services to be supplied under the Contract and financed by the Bank, shall have as their country of origin an eligible country of the Bank as listed in Section V, Eligible Countries.
- 5.2 For purposes of this Clause, the term goods includes commodities, raw material, machinery, equipment, and industrial plants; and services includes services such as insurance, transportation, installation, commissioning, training, and initial maintenance.
- 5.3 The term "country of origin" means the country where the goods have been mined, grown or produced when through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 5.4 The nationality of the firm that produces, assembles, distributes or

sells the goods shall not determine the origin of the goods. Goods shall be considered to originate in a country if they meet the criterion of at least 50% by value derived from within that country.

## B. Contents of Bidding Document

6. **Sections of Bidding Document**
- 6.1 The Bidding Document consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.
- PART 1 Bidding Procedures**
- Section I - Instructions to Bidders (ITB)
  - Section II - Bid Data Sheet (BDS)
  - Section III - Evaluation and Qualification Criteria
  - Section IV - Bidding Forms
  - Section V - Eligible Countries
- PART 2 Requirements**
- Section VI - Requirements
- PART 3 Conditions of Contract and Contract Forms**
- Section VII - General Conditions (GCC)
  - Section VIII - Particular Conditions (PCC)
  - Section IX - Contract Forms
- 6.2 The Invitation for Bids issued by the *Employer* is not part of the Bidding Document.
- 6.3 The *Bidder* shall obtain the Bidding Document from the source stated by the *Employer* in the Invitation for Bids; otherwise the *Employer* is not responsible for the completeness of the Bidding Document.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.
7. **Clarification of Bidding Document, Site Visit, Pre-Bid Meeting**
- 7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the *Employer* in writing at the *Employer's* address **indicated in the BDS** or raise his inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The *Employer* will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of bids, within number of days specified **in the BDS**. The *Employer's* response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry

but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.

- 7.2 Where applicable, the Bidder is advised to visit and examine the project site and obtain for itself, on its own responsibility, all information that may be necessary for preparing the bid and entering into a contract for provision of the Requirements. The costs of visiting the Site shall be at the Bidder's own expense.
  - 7.3 Pursuant to ITB 7.2, where the Bidder and any of its personnel or agents have been granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the visit
  - 7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if **provided for in the BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. If so provided in the BDS, the Employer will organize a site visit.
  - 7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the *Employer* not later than one week before the meeting.
  - 7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the *Employer* exclusively through the issue of an Addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.
  - 7.7 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.
8. **Amendment of Bidding Document**
- 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.
  - 8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the

Bidding Document from the Employer in accordance with ITB 6.3.

- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2

### **C. Preparation of Bids**

9. **Cost of Bidding** 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
10. **Language of Bid** 10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.
11. **Documents Comprising the Bid** 11.1 The Bid shall comprise the following:
- (a) Letter of Bid;
  - (b) Completed Schedules, as provided in Section IV, Bidding Forms;
  - (c) Bid Security or Bid Securing Declaration, in accordance with ITB 19;
  - (d) at the Bidder's option, alternative proposals if permissible, in accordance with ITB 13;
  - (e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
  - (f) documentary evidence establishing the Bidder's qualifications in accordance with the requirements of Section III, Evaluation and Qualification Criteria, using the relevant forms furnished in Section IV, Bidding Forms;
  - (g) documentary evidence as specified in the BDS, establishing the conformity of the Technical Proposal offered by the Bidder with the Bidding Document, using the relevant forms furnished

in Section IV, Bidding Forms;

(h) In the case of a bid submitted by a JVCA, JVCA agreement, or letter of intent to enter into a JVCA including a draft agreement, indicating at least the parts of the Requirements to be executed by the respective partners; and

(i) **Any other document required in the BDS.**

12. **Letter of Bid and Schedules**

12.1 The Letter of Bid and Schedules shall be prepared using the relevant forms in Section IV, Bidding Forms. The forms must be completed as indicated in each form

13. **Alternative Proposals**

13.1 Unless otherwise **indicated in the BDS**, alternative proposals shall not be considered. If alternative proposals are permitted, their method of evaluation shall be as stipulated in Section III, Evaluation and Qualification Criteria.

13.2 When alternative times for completion are explicitly invited, a statement to that effect will be **included in the BDS**, as will the method of evaluating different times for completion.

13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Document must first price the *Employer's* requirements as described in the Bidding Document and shall further provide all information necessary for a complete evaluation of the alternative by the *Employer*, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the *Employer*.

13.4 When **specified in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Requirements and such parts will be **identified in the BDS** as will the method for their evaluation and described in Section VI, Requirements.

14. **Bid Prices and Discounts**

14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Schedules shall conform to the requirements specified in ITB 14.2.

14.2 Unless otherwise provided in the BDS and the GCC, the prices quoted by the Bidder shall be fixed.

14.3 The Bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the

Works, as identified in Section IV, Bidding Forms. In case of admeasurement contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the *Employer* when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.

- 14.4 The price to be quoted in the Letter of Bid shall be the total price of the Bid, excluding any discounts offered.
- 14.5 Unconditional discounts, if any, and the methodology for their application shall be quoted in the Letter of Bid, in accordance with ITB 12.1
- 14.6 If so indicated in ITB 1.1, bids are invited for individual contracts or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all contracts are submitted and opened at the same time.
- 14.7 Unless otherwise **provided in the BDS** and the Conditions of Contract, the prices quoted by the Bidder shall be fixed. If the prices quoted by the Bidder are not fixed in accordance with ITB 14.2 but are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data in Section IV (Bidding Forms) and the *Employer* may require the Bidder to justify its proposed indices and weightings.
- 14.8 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total bid price submitted by the Bidder.
15. **Currencies of Bid and Payment** 15.1 The currency(ies) of the bid and the currency(ies) of payment shall be as **specified in the BDS**.
16. **Documents Establishing the Qualifications of the Bidder** 16.1 To establish its qualifications to perform the Contract, the Bidder shall provide the information requested in Section III (Evaluation and Qualification Criteria).

- 16.2 **If so required in the BDS**, a Bidder shall submit the Manufacturers Authorisation using the form included in Section IV, Bidding Forms, where the Bidder does not manufacture or produce the goods it offers to supply.
- 16.3 **If so required in the BDS**, a Bidder shall submit evidence that it will be represented by an agent in the country, equipped and able to carry out the supplier's maintenance, repair and spare parts stocking obligations prescribed in the Conditions of Contract and requirements where a Bidder does not conduct business within the Employer's country.
- 16.4 Regional Bidders, individually or in joint ventures, applying for eligibility for regional margin of preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 33.
17. **Documents Establishing the Eligibility of the Goods and Services**
- 17.1 To establish the eligibility of the Good and Services in accordance with ITB 5, Bidders shall complete the forms included in Section IV, Bidding Forms.
18. **Period of Validity of Bids**
- 18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Employer. A bid which is valid for a shorter period shall be rejected by the Employer as non-responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the *Employer* may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, the bidder granting the request shall also extend the bid security for 28 days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid except as provided in ITB 19.3.
- 18.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be adjusted by a factor specified in the request for extension. Bid evaluation shall be based on the Bid Price without taking into consideration the above correction.
19. **Bid Security**
- 19.1 The Bidder shall furnish as part of its bid, the original of either a Bid-Securing Declaration or a bid security using the relevant form

included in Section IV, Bidding Forms. In the case of a bid security, the amount shall be **as specified in the BDS**.

19.2 A Bid Securing Declaration shall use the form included in Section IV Bidding Forms.

19.3 If a bid security is specified pursuant to ITB 19.1, the bid security shall be a demand guarantee, in any of the following forms at the Bidder's option:

- (a) an unconditional guarantee, issued by a bank *or surety*;
- (b) an irrevocable letter of credit; or
- (c) a cashier's or certified check.

from a reputable source from an eligible country. If the unconditional guarantee is issued by an insurance company or bonding company located outside the Employer's Country, the issuer shall have a correspondent financial institution located in the Employer's Country to make it enforceable. In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms or in another substantially similar format approved by the *Employer* prior to bid submission. In either case, the form must include the complete name of the Bidder. The bid security shall be valid for twenty-eight days (28) beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

19.4 Any bid not accompanied by a *substantially* responsive bid security *or Bid Securing Declaration*, if required in accordance with ITB 19.1, shall be rejected by the *Employer* as non-responsive.

19.5 If a bid security is specified pursuant to ITB 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to ITB 41.

19.6 If a bid security is specified pursuant to ITB 19.1, the bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.

19.7 The bid security may be forfeited or the Bid Securing Declaration executed:

- (a) if a Bidder withdraws its bid during the period of bid

validity specified by the Bidder on the Letter of Bid or

(b) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB 40; or

(ii) furnish a performance security in accordance with ITB 41.

19.8 The Bid Security or the Bid Securing Declaration of a *JVCA* shall be in the name of the *JVCA* that submits the bid. If the *JVCA* has not been constituted into a legally-enforceable *JVCA*, at the time of bidding, the Bid Security or the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.

20. **Format and  
Signing of Bid**

20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL". Alternative proposals, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the bid in the number **specified in the BDS**, and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as **specified in the BDS** and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries have been made shall be signed or initialled by the person signing the bid.

20.3 A bid submitted by a *JVCA* shall comply with the following requirements:

(a) unless not required in accordance with ITB 4.1 (a), be signed so as to be legally binding on all partners; and

(b) include the representatives authorization referred to in ITB 4.1 (b) consisting of a Power of Attorney signed by those legally authorised to sign on behalf of the *JVCA*.

20.4 Any amendments, interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.

## D. Submission and Opening of Bids

21. **Sealing and Marking of Bids**
- 21.1 Bidders may always submit their bids by mail or by hand. If so **specified in the BDS**, bidders shall have the option of submitting their bids electronically. Procedures for submission, sealing and marking are as follows:
- (a) Bidders submitting bids by mail or by hand shall enclose the original and each copy of the Bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as “ORIGINAL”, “ALTERNATIVE” and “COPY.” These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB sub-Clauses 21.2 and 21.3.
  - (b) Bidders submitting bids electronically shall follow the electronic bid submission procedures **specified in the BDS**.
- 21.2 The inner and outer envelopes shall:
- (a) bear the name and address of the Bidder;
  - (b) be addressed to the *Employer* in accordance with ITB 22.1;
  - (c) bear the specific identification of this bidding process indicated in accordance with ITB 1.1; and
  - (d) bear a warning not to open before the time and date for bid opening.
- 21.3 If envelopes and packages are not sealed and marked as required, the *Employer* will assume no responsibility for the misplacement or premature opening of the bid.
22. **Deadline for Submission of Bids**
- 22.1 Bids must be received by the *Employer* at the address and no later than the date and time **indicated in the BDS**.
- 22.2 The *Employer* may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the *Employer* and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
23. **Late Bids**
- 23.1 The *Employer* shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the *Employer* after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the

Bidder.

24. **Withdrawal,  
Substitution,  
and  
Modification of  
Bids**

24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:

- (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “Withdrawal,” “Substitution,” “Modification;” and
- (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with ITB 22.

24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.

24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25. **Bid Opening**

25.1 The *Employer* shall conduct the bid opening in public in the presence of Bidders’ designated representatives and anyone who choose to attend at the address, date and time **specified in the BDS**. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 21.1, shall be as **specified in the BDS**.

25.2 First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked “SUBSTITUTION” shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked “MODIFICATION” shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is

read out at bid opening. Only envelopes that are opened and read out at bid opening shall be considered further.

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

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

## **E. Examination of Bids**

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

to confirm the correction of arithmetic errors discovered by the *Employer* in the evaluation of the bids, in accordance with ITB 29.

27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the *Employer's* request for clarification, its bid may be rejected.

28. **Determination  
of  
Responsiveness**

28.1 The *Employer's* determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB 11.

28.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission.

(a) "Deviation" is a departure from the requirements specified in the Bidding Document;

(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

28.3 A material deviation, reservation, or omission is one that,

(a) if accepted, would:

(i) affect in any substantial way the scope, quality, or performance of the Requirements as specified in Section VI; or

(ii) limit in any substantial way, inconsistent with the Bidding Document, the *Employer's* rights or the Bidder's obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

28.4 The *Employer* shall examine the technical aspects of the bid in particular, to confirm that all requirements of Section VI have been met without any material deviation, reservation or omission.

28.5 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the *Employer* and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

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

#### **F. Bid Evaluation and Comparison**

29. **Correction of Arithmetical Errors**
- 29.1 Provided that the bid is substantially responsive, the *Employer* shall correct arithmetical errors as indicated in Section III, Evaluation and Qualification Criteria.
- 29.2 If the Bidder does not accept the correction of errors, its bid shall be declared non-responsive and its Bid Security shall be forfeited or the Bid Securing Declaration executed.
30. **Conversion to Single Currency**
- 30.1 For evaluation and comparison purposes, the currency(ies) of the bid shall be converted into a single currency as specified in Section III, Evaluation and Qualification Criteria.
31. **Bid Adjustments**
- 31.1 For the evaluation and comparison purposes the *Employer* shall adjust the bid prices using the criteria and methodology specified in Section III, Evaluation and Qualification Criteria.
- 31.2 Unless otherwise specified in the BDS, no regional margin of preference shall apply. If a margin of preference applies, the application methodology shall be as specified in Section III, Evaluation and Qualification Criteria.
- 31.3 If in the opinion of the *Employer* the bid which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded *or substantially below the Employer's estimates*, the *Employer* may require the Bidder to produce detailed price analyses for any or all items of the *Bill of Quantities*, to

demonstrate the internal consistency of those prices with the methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the *Employer* may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the *Employer* against financial loss in the event of default of the successful Bidder under the Contract.

32. **Qualification of the Bidder**
- 32.1 The *Employer* shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 16.1.
- 32.3 An affirmative determination of qualification shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the *Employer* shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 32.4 The capabilities of the manufacturers and subcontractors proposed in its Bid to be used by the lowest evaluated Bidder for identified major items of the Requirements will also be evaluated for acceptability in accordance with the criteria and methodologies defined in Section III, Evaluation and Qualification Criteria. Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or subcontractor without any change to the bid price.
33. **Employer's Right to Accept Any Bid, and to Reject Any or All Bids**
- 33.1 The *Employer* reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

### **G. Award of Contract**

34. **Award Criteria**
- 34.1 The *Employer* shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the

Contract satisfactorily.

**35. Notification of Award**

- 35.1 Prior to the expiration of the period of bid validity, the *Employer* shall notify the successful Bidder, in writing, that its bid has been accepted.
- 35.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 35.3 At the same time, the *Employer* shall also notify all other Bidders of the results of the bidding, and shall publish in *UNDB online and in the Bank's website* the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful bidders may request in writing to the *Employer* for a debriefing seeking explanations on the grounds on which their bids were not selected. The *Employer* shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests a debriefing.

**36. Signing of Contract**

- 36.1 Promptly after notification, the *Employer* shall send the successful Bidder the Contract Agreement.
- 36.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the *Employer*.
- 36.3 Upon the successful Bidder's furnishing of the signed Contract Agreement and Performance Security pursuant to ITB 38, the [*Employer or Purchaser*] will discharge its Bid Security, pursuant to ITB 19.
- 36.4 *Notwithstanding ITB 36.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Employer, to the country of the Employer, or to the use of the products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its bid, always provided, however, that the Bidder can demonstrate to the satisfaction of the Employer and of the Bank that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits,*

*authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract Agreement.*

**37. Performance Security**

- 37.1 Within twenty-eight (28) days of the receipt of notification of award from the *Employer*, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 31.3, using for that purpose the Performance Security Form included in Section IX (Contract Forms), or another form acceptable to the Employer. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.
- 37.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, or execution of the Bid Security Declaration. In that event the *Employer* may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the *Employer* to be qualified to perform the Contract satisfactorily.

## Section II - Bid Data Sheet (BDS)

### A. Introduction

<b>ITB 1.1</b>	The <i>Employer</i> is: <b>Ministry of Education, Government of Antigua and Barbuda.</b>
<b>ITB 1.1</b>	The name of the bidding process is: <b>BEP II - Sir McChesney George Secondary School.</b>  The identification number of the bidding process is: <b>to be assigned by the CDB.</b>  The number and identification of lots comprising this bidding process is: <b>1 Lot.</b>
<b>ITB 2.1</b>	The Recipient is: <b>Ministry of Education, Government of Antigua and Barbuda.</b>
<b>ITB 2.1</b>	The name of the Project is: <b>BEP II - Sir McChesney George Secondary School.</b>
<b>ITB 4.1(a)</b>	<i>The individuals or firms in a JVCA, “shall be” be jointly and severally liable.</i>

### B. Bidding Documents

<b>ITB 7.1</b>	<p>For <b><u>clarification purposes</u></b> only, the <i>Employer</i>'s address is:</p> <p><b>Antigua and Barbuda Tenders Board Ministry of Finance and Corporate Governance Parliament Drive Government Office Complex St. John's Antigua and Barbuda</b></p> <p><b>Tel: (268) 462-2953</b></p> <p><b>Fax: (268) 462-4622</b></p> <p><b>Email: tenders.board@ab.gov.ag</b></p> <p>Requests for clarification should be received by the <i>Employer</i> no later than: <b>14 days.</b></p>
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<b>ITB 7.4</b>	There will be no pre-bid meeting.
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### C. Preparation of Bids

<b>ITB 10.1</b>	The language of the bid is: <i>English</i> .
<b>ITB 11.1 (b)</b>	The following schedules shall be submitted with the bid: <i>Bill of Quantities, draft programme of works and methodology, breakdown of Preliminaries costs</i> .
<b>ITB 11.1 (i)</b>	The Bidder shall submit with its bid the following additional documents: <i>N/A</i> .
<b>ITB 13.1</b>	Alternative bids <i>shall not be</i> permitted.
<b>ITB 13.2</b>	Alternative times for completion <i>shall not be</i> permitted.  If alternative times for completion are permitted, the evaluation method will be as specified in Section III (Evaluation and Qualification Criteria).
<b>ITB 13.4</b>	Alternative technical solutions shall be permitted for the following parts of the Works: <i>None</i>  If alternative technical solutions are permitted, the evaluation method will be as specified in Section III (Evaluation and Qualification Criteria).
<b>ITB 14.7</b>	The prices quoted by the Bidder <i>shall not be</i> subject to adjustment during the performance of the Contract.
<b>ITB 14.8</b>	All goods imported by the Contractor into the country shall be exempt from customs and other import duties, subject to final approval of the Ministry of Finance. The Employer shall endorse the necessary exemption document prepared by the Contractor for presentation in order to clear the Goods through Customs.  If exemption is not granted by the Ministry of Finance, the customs duties payable and paid shall be reimbursed by the Employer. All imported goods, which are not incorporated in or expended in connection with the Works, shall be exported on completion of the Contract. If not exported, the Goods will be assessed for duties as applicable to the Goods involved in accordance with the laws of the Country.

	<p>However, exemption may not be available for:</p> <ul style="list-style-type: none"> <li>a. Goods which are similar to those locally produced, unless they are not available in sufficient quantities or are of a different standard to that which is necessary for the Works; and</li> <li>b. Any element of duty or tax inherent in the price of goods or services procured in the Country, which shall be deemed to be included in the Accepted Contract Amount.</li> </ul> <p>Port duties, quay dues and except as setout above, any element of tax or duty inherent in the price of goods or services shall be deemed to be included in the Accepted Contract Amount.</p>
<p><b>ITB 15.1</b></p>	<p>The currency(ies) of the bid and the payment currency(ies) shall be as described below:</p> <p><b>Alternative B (Bidders allowed to quote in local and foreign currencies):</b></p> <ul style="list-style-type: none"> <li>(a) The unit rates and prices shall be quoted by the Bidder in the Bill of Quantities separately in the following currencies: <ul style="list-style-type: none"> <li>(i) for those inputs to the Requirements that the Bidder expects to supply from within the <i>Employer's</i> country, in <i>EC\$</i>, further referred to as “the local currency”; and</li> <li>(ii) for those inputs to the Requirements that the Bidder expects to supply from outside the <i>Employer's</i> country (referred to as “the foreign currency requirements”), in up to any three currencies of any country.</li> </ul> </li> <li>(b) Bidders may be required by the <i>Employer</i> to justify, to the <i>Employer's</i> satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Section IV. Schedule of Adjustment Data are reasonable, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.</li> </ul> <p style="text-align: center;">In case of NCB</p> <p>The currency of the bid and payment shall be: <i>US\$</i></p>
<p><b>ITB 16.2</b></p>	<p>The Bidder <i>shall not</i> submit with its bid, the Manufacturer’s Authorization for the following part: <i>N/A</i>.</p>

<b>ITB 16.3</b>	The Bidder <i>shall not</i> submit with its bid, evidence that it will be represented by an Agent in the country.
<b>ITB 18.1</b>	The bid validity period shall be: <b>120 days</b> .
<b>ITB 19.1</b>	- The Bidder shall furnish a <b>Bid-Securing Declaration</b> .
<b>ITB 19.3 (d)</b>	<i>None</i>
<b>ITB 20.1</b>	In addition to the original of the bid, the number of copies is: <b>one</b> .
<b>ITB 20.2</b>	The written confirmation of authorization to sign on behalf of the Bidder shall be:  <i>(a) a Power of Attorney witnessed and signed by a Notary Public.</i>  <i>(b) In the case of Bids submitted by an existing or intended JVCA an undertaking signed by all parties (i) stating that all parties shall be jointly and severally liable, if so required in accordance with ITB 4.1(a), and (ii) nominating a Representative who shall have the authority to conduct all business for and on behalf of any and all the parties of the JVCA during the bidding process and, in the event the JV is awarded the Contract, during contract execution.</i>

#### **D. Submission and Opening of Bids**

<b>ITB 21.1</b>	Bidders <i>shall not</i> have the option of submitting their bids electronically.
<b>ITB 21.1 (b)</b>	If bidders shall have the option of submitting their bids electronically, the electronic bidding submission procedures shall be: <i>N/A</i> .
<b>ITB 22.1</b>	For <b>bid submission purposes</b> only, the <i>Employer's</i> address is:  <b><i>Antigua and Barbuda Tenders Board</i></b> <b><i>Ministry of Finance and Corporate Governance</i></b> <b><i>Parliament Drive</i></b> <b><i>Government Office Complex</i></b> <b><i>St. John's</i></b> <b><i>Antigua and Barbuda</i></b>  <b><i>Tel: (268) 462-2953</i></b>  <b><i>Fax: (268) 462-4622</i></b>  <b><i>Email: tenders.board@ab.gov.ag</i></b>

	<p><b>The deadline for bid submission is:</b></p> <p>Date: <i>Wednesday, 25th October, 2017</i> Time: <i>14:00 hours</i></p>
<b>ITB 25.1</b>	<p>The bid opening shall take place at: Street Address:</p> <p><i>Antigua and Barbuda Tenders Board</i> <i>Ministry of Finance and Corporate Governance</i> <i>Parliament Drive</i> <i>Government Office Complex</i> <i>St. John's</i> <i>Antigua and Barbuda</i> <i>Tel: (268) 462-2953</i> <i>Fax: (268) 462-4622</i> <i>Email: tenders.board@ab.gov.ag</i> Date: <i>Wednesday, 25th October, 2017</i></p> <p>Time: <i>14:30 hours</i></p>
<b>ITB 25.1</b>	<p>If electronic bid submission is permitted in accordance with ITB 21.1, the specific bid opening procedures shall be: <i>N/A</i>.</p>

#### **E. Evaluation and Comparison of Bids**

<b>ITB 30.1</b>	<p>The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: <i>EC\$</i></p> <p>The source of exchange rate shall be: <i>Eastern Caribbean Central Bank</i>.</p> <p>The date for the exchange rate shall be: <i>10 days prior to submission date</i>.</p>
<b>ITB 31.2</b>	<p><i>A regional margin of preference shall not apply.</i></p>

## **Section III - Evaluation and Qualification Criteria**

This section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders if the bidding was not preceded by a prequalification exercise and post-qualification is applied. In accordance with ITB 34 and ITB 36, no other methods, criteria and factors shall be used. The Bidder shall provide all the information requested in the forms included in Section IV (Bidding Forms).

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## **1. Evaluation**

In addition to the criteria listed in ITB 34.2 (a) – (e) the following criteria shall apply:

### **1.1 Adequacy of Technical Proposal**

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (*Employer's Requirements*).

### **1.2 Multiple Contracts**

Pursuant to Sub-Clause 34.4 of the Instructions to Bidders, if Works are grouped in multiple contracts, evaluation will be as follows:

### **1.3 Completion Time**

An alternative Completion Time, if permitted under ITB 13.2, will be evaluated as follows:

### **1.4 Technical Alternatives**

Technical alternatives, if permitted under ITB 13.4, will be evaluated as follows:

### **1.5 Margin of Preference [Applicable for ICB only]**

*If a margin of preference shall apply under ITB 33.1, the procedure will be as follows as:*

## 2. Qualification

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

<b><i>Factor</i></b>	<b>2.2 Historical Contract Non-Performance</b>						
<b><i>Sub-Factor</i></b>	<b><i>Criteria</i></b>					<b><i>Documentation Required</i></b>	
	<b><i>Requirement</i></b>	<b><i>Bidder</i></b>					
		<b><i>Single Entity</i></b>	<b><i>Joint Venture, Consortium or Association</i></b>				
			<b><i>All partners combined</i></b>	<b><i>Each partner</i></b>	<b><i>At least one partner</i></b>		
<i>2.2.1 History of non-performing contracts</i>	<i>Non-performance of a contract did not occur within the last five (5) years prior to the deadline for application submission, based on all information on fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the Dispute Resolution Mechanism under the respective contract, and where all appeal instances available to the bidder have been exhausted.</i>	<i>Must meet requirement by itself or as partner to past or existing JVCA</i>	<i>N / A</i>	<i>Must meet requirement by itself or as partner to past or existing JVCA</i>	<i>N / A</i>	<i>Form CON - 2</i>	
<i>2.2.2 Pending Litigation</i>	<i>All pending litigation shall in total not represent more than ten percent (10%) of the Bidder's net worth and shall be treated as resolved against the Bidder.</i>	<i>Must meet requirement by itself or as partner to past or existing JVCA</i>	<i>N / A</i>	<i>Must meet requirement by itself or as partner to past or existing JVCA</i>	<i>N / A</i>	<i>Form CON – 2</i>	

<b><i>Factor</i></b>	<b>2.3 Financial Situation</b>					
<b><i>Sub-Factor</i></b>	<b><i>Criteria</i></b>					<b><i>Documentation Required</i></b>
	<b><i>Requirement</i></b>	<b><i>Bidder</i></b>				
		<b><i>Single Entity</i></b>	<b><i>Joint Venture, Consortium or Association</i></b>			
<b><i>All partners combined</i></b>			<b><i>Each partner</i></b>	<b><i>At least one partner</i></b>		
<b><i>2.3.1 Historical Financial Performance</i></b>	<i>Submission of audited balance sheets or if not required by the law of the bidder's country, other financial statements acceptable to the Employer, for the last three (3) years to demonstrate the current soundness of the bidders financial position and its prospective long term profitability. (a) (criterion 1) (b) (criterion 2)</i>	<i>Must meet requirement</i>	<i>N / A</i>	<i>Must meet requirement</i>	<i>N / A</i>	<i>Form FIN – 3.1 with attachments</i>
<b><i>2.3.2. Average Annual Turnover</i></b>	<i>Minimum average annual turnover of EC\$3,400,000.00, calculated as total certified payments received for contracts in progress or completed, within the last five (5 ) years</i>	<i>Must meet requirement</i>	<i>Must meet requirement</i>	<i>Must meet forty percent (40%) of the requirement</i>	<i>Must meet fifty percent (50%) of the requirement</i>	<i>Form FIN –3.2</i>

<b><i>Factor</i></b>	<b>2.3 Financial Situation</b>					
<b><i>Sub-Factor</i></b>	<b><i>Criteria</i></b>					<b><i>Documentation Required</i></b>
	<b><i>Requirement</i></b>	<b><i>Bidder</i></b>				
		<b><i>Single Entity</i></b>	<b><i>Joint Venture, Consortium or Association</i></b>			
<b><i>All partners combined</i></b>			<b><i>Each partner</i></b>	<b><i>At least one partner</i></b>		
2.3.3. <i>Financial Resources</i>	<p><i>The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:</i></p> <p><i>(i) the following cash-flow requirement:</i>  <i>ECD\$600,000.00</i>  <i>and</i>  <i>(ii) the overall cash flow requirements for this contract and its concurrent commitments.</i></p>	<i>Must meet requirement</i>	<i>Must meet requirement</i>	<i>Must meet forty percent (40%) of the requirement</i>	<i>Must meet fifty percent (50%) of the requirement</i>	<i>Form FIN –3.3</i>

<b>Factor</b>	<b>2.4 Experience</b>					
<b>Sub-Factor</b>	<b>Criteria</b>					<b>Documentation Required</b>
	<b>Requirement</b>	<b>Bidder</b>				
		<b>Single Entity</b>	<b>Joint Venture, Consortium or Association</b>			
<b>All partners combined</b>			<b>Each partner</b>	<b>At least one partner</b>		
2.4.1 General Experience	Experience under contracts in the role of contractor, subcontractor, or management contractor for at least the last five (5) years prior to the applications submission deadline, and with activity in at least nine (9) months in each year.	Must meet requirement	N / A	Must meet requirement	N / A	Form EXP-4.1
2.4.2 Specific Experience	(a) Participation as contractor, management contractor, or subcontractor; in at least one (1) contract within the last six (6) years, each with a value of at least US\$1,222,222.22, that have been successfully and substantially completed and that are similar to the proposed Works. The similarity shall be based on the physical size, complexity, methods/ technology or other characteristics as described in	Must meet requirement	Must meet requirements for all characteristics	N / A	Must meet requirement for one characteristic	Form EXP 2.4.2(a)

<b><i>Factor</i></b>	<b>2.4 Experience</b>					
<b><i>Sub-Factor</i></b>	<b><i>Criteria</i></b>					<b><i>Documentation Required</i></b>
	<b><i>Requirement</i></b>	<b><i>Bidder</i></b>				
		<b><i>Single Entity</i></b>	<b><i>Joint Venture, Consortium or Association</i></b>			
<b><i>All partners combined</i></b>			<b><i>Each partner</i></b>	<b><i>At least one partner</i></b>		
	<i>Section VI, Employer's Requirements.</i>					
<i>2.4.2 Specific Experience</i>	<i>b) For the above or other contracts executed during the period stipulated in 2.4.2(a) above, a minimum experience in the following key activities: .....</i>	<i>Must meet requirements</i>	<i>Must meet requirements</i>	<i>N / A</i>	<i>Must meet requirements</i>	<i>Form EXP-2.4.2(b)</i>

## 2.5 Personnel

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

<i>No.</i>	<i>Position</i>	<i>Total Work Similar Experience (years)</i>	<i>In Similar Works Experience (years)</i>
1	Site Agent	15	10
2	Site Foreman	15	10
3			
4			
5			

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

## 2.6 Equipment

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

<i>No.</i>	<i>Equipment Type and Characteristics</i>	<i>Minimum Number required</i>
1	Hoist	1
2	Cement Mixer	1
3		
4		
5		

The Bidder shall provide further details of proposed items of equipment using the relevant Form in Section IV.

## Section IV - Bidding Forms

### Table of Forms

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## Letter of Bid

*The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and address.*

Date: \_\_\_\_\_  
 Bidding No.: \_\_\_\_\_  
 Invitation for Bid No.: \_\_\_\_\_

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) Clause 8;
- (b) We offer to execute in conformity with the Bidding Documents the following Works:  
 \_\_\_\_\_;
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is:  
 \_\_\_\_\_;
- (d) The discounts offered and the methodology for their application are: \_\_\_\_\_;
- (e) Our bid shall be valid for a period of \_\_\_\_\_ *[insert validity period as specified in ITB 18.1.]* days 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;
- (f) If price adjustment provisions apply, the Table(s) of Adjustment Data shall be considered part of this Bid;<sup>1</sup>
- (g) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document;
- (h) Our firm, including any employees, subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries;
- (i) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;

<sup>1</sup> Include if price adjustment provisions apply in the Contract in accordance with PCC Sub-Clause **44.1 Price Adjustment**.

- (j) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;
- (k) Our firm, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, has not been declared ineligible by the Bank, under the *Employer's* country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (l) We are not a government owned entity / We are a government owned entity but meet the requirements of ITB 4.5;<sup>2</sup>
- (m) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:<sup>3</sup>

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____

- (n) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (o) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive; and
- (p) 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: \_\_\_\_\_

<sup>2</sup> Use one of the two options as appropriate.

<sup>3</sup> If none has been paid or is to be paid, indicate "none".

## Schedules

### Bill of Quantities/ Schedules of Prices

#### Schedule of Payment Currencies

For .....insert name of Section of the Works

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

	A	B	C	D
Name of Payment Currency	Amount of Currency	Rate of Exchange to Local Currency	Local Currency Equivalent $C = A \times B$	Percentage of Net Bid Price (NBP) $\frac{100 \times C}{NBP}$
Local currency _____		1.00		
Foreign Currency #1 _____				
Foreign Currency #2 _____				
Foreign Currency #3 _____				
Net Bid Price				100.00
Provisional Sums Expressed in Local Currency		1.00		
<b>BID PRICE</b>				

### Table(s) of Adjustment Data

Table A - Local Currency

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Local Currency Amount	Bidder's Proposed Weighting
	Nonadjustable	—	—	—	A: _____ B: _____ C: _____ D: _____ E: _____
<b>Total</b>					<b>1.00</b>

Table B - Foreign Currency

Name of Currency: \_\_\_\_\_

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

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

## ***Form of Bid Security (Bank Guarantee)***

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

**Beneficiary:** \_\_\_\_\_ *[Name and Address of Employer]*

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

**BID GUARANTEE No.:** \_\_\_\_\_

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

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

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

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

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

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

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

\_\_\_\_\_

[signature(s)]

## ***Form of Bid Security (Bid Bond)***

BOND NO. \_\_\_\_\_

BY THIS BOND [*name of Bidder*] as Principal (hereinafter called “the Principal”), and [*name, legal title, and address of surety*], **authorized to transact business in** [*name of country of Employer*], as Surety (hereinafter called “the Surety”), are held and firmly bound unto [*name of Employer*] as Obligee (hereinafter called “the Employer”) in the sum of [*amount of Bond*]<sup>4</sup> [*amount in words*], for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted a written Bid to the *Employer* dated the \_\_\_ day of \_\_\_\_\_, 20\_\_\_, for the construction of [*name of Contract*] (hereinafter called the “Bid”).

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

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

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

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 28 days after the date of expiration of the Bid validity as stated in the Invitation to Bid or extended by the *Employer* at any time prior to this date, notice of which extension(s) to the Surety being hereby waived.

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

Principal: \_\_\_\_\_

Surety: \_\_\_\_\_

Corporate Seal (where appropriate)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
(Printed name and title)

<sup>4</sup> The amount of the Bond shall be denominated in the currency of the *Employer*'s country or the equivalent amount in a freely convertible currency.

## ***Form of Bid-Securing Declaration***

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

Bid No.: *[insert number of bidding process]*

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

To: *[insert complete name of Employer]*

We, the undersigned, declare that:

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

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Recipient for the period of time of *twelve (12)* starting on *October 11th, 2017*, if we are in breach of our obligation(s) under the bid conditions, because we:

- (a) have withdrawn our Bid during the period of bid validity specified in the Letter of Bid; or
- (b) having been notified of the acceptance of our Bid by the *Employer* during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB.

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

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

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

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

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

Corporate Seal (where appropriate)

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

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

# **Technical Proposal**

## **Technical Proposal Forms**

**Personnel**

**Equipment**

**Site Organization**

**Method Statement**

**Mobilization Schedule**

**Construction Schedule**

**Others**

## Forms for Personnel

### Form PER – 1: Proposed Personnel

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

<b>1.</b>	<b>Title of position</b>
	<b>Name</b>
<b>2.</b>	<b>Title of position</b>
	<b>Name</b>
<b>3.</b>	<b>Title of position</b>
	<b>Name</b>
<b>4.</b>	<b>Title of position</b>
	<b>Name</b>
<b>5.</b>	<b>Title of position</b>
	<b>Name</b>
<b>6.</b>	<b>Title of position</b>
	<b>Name</b>
<b>etc.</b>	<b>Title of position</b>
	<b>Name</b>



## Forms for Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III (Evaluation and Qualification Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder. The Bidder shall provide all the information requested below, to the extent possible. Fields with asterisk (\*) shall be used for evaluation.

<b>Type of Equipment*</b>					
<b>Equipment Information</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 5px;"><b>Name of manufacturer</b></td> <td style="padding: 5px;"><b>Model and power rating</b></td> </tr> <tr> <td style="padding: 5px;"><b>Capacity*</b></td> <td style="padding: 5px;"><b>Year of manufacture*</b></td> </tr> </table>	<b>Name of manufacturer</b>	<b>Model and power rating</b>	<b>Capacity*</b>	<b>Year of manufacture*</b>
	<b>Name of manufacturer</b>	<b>Model and power rating</b>			
<b>Capacity*</b>	<b>Year of manufacture*</b>				
<b>Current Status</b>	<b>Current location</b>				
	<b>Details of current commitments</b>				
<b>Source</b>	<b>Indicate source of the equipment</b> <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured				

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

<b>Owner</b>	<b>Name of owner</b>	
	<b>Address of owner</b>	
	<b>Telephone</b>	<b>Contact name and title</b>
	<b>Fax</b>	<b>Telex</b>
<b>Agreements</b>	<b>Details of rental / lease / manufacture agreements specific to the project</b>	

## **Bidder's Qualification**

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

**Form ELI 1.1**  
**Bidder Information Sheet**

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

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

**Form ELI 1.2**  
**Party to JVCA Information Sheet**

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

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

## Form CON – 2

### Historical Contract Non-Performance

Bidder’s Legal Name: \_\_\_\_\_  
 JVCA Partner Legal Name: \_\_\_\_\_

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

Bidding No.: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_ pages

Non-Performing Contracts in accordance with (Evaluation and Qualification Criteria)			
<input type="checkbox"/> Contract non-performance did not occur during the stipulated period, in accordance with Sub-Factor 2.2.1 of Section III (Evaluation and Qualification Criteria)			
<input type="checkbox"/> Contract non-performance during the stipulated period, in accordance with Sub-Factor 2.2.1 of Section III(Evaluation and Qualification Criteria).			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, US\$ equivalent)
_____	_____	Contract Identification: Name of <i>Employer</i> : _____ Address of <i>Employer</i> : _____ Matter in dispute: _____	_____
Pending Litigation, in accordance with Section III (Evaluation and Qualification Criteria)			
<input type="checkbox"/> No pending litigation in accordance with Sub-Factor 2.2.2 of Section III(Evaluation and Qualification Criteria)			
<input type="checkbox"/> Pending litigation in accordance with Sub-Factor 2.2.2 of Section III(Evaluation and Qualification Criteria), as indicated below			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, US\$ equivalent)
_____	_____	Contract Identification: Name of <i>Employer</i> : _____ Address of <i>Employer</i> : _____ Matter in dispute: _____	_____
_____	_____	Contract Identification: Name of <i>Employer</i> : _____ Address of <i>Employer</i> : _____ Matter in dispute: _____	_____

## Form CCC

**Current Contract Commitments / Works in Progress**

Bidders and each partner to a *JVCA* should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	<i>Employer,</i> contact address/tel/fax	Value of outstanding work (current US\$ equivalent)	Estimated completion date	Average monthly invoicing over last six months (US\$/month)
1.				
2.				
3.				
4.				
5.				
etc.				

## Financial Situation

### Historical Financial Performance

Bidder's Legal Name: \_\_\_\_\_ Date: \_\_\_\_\_

JVCA Partner Legal Name: \_\_\_\_\_ Bidding No.: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_ pages

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

Financial information in US\$ equivalent	Historic information for previous _____ ( ) years (US\$ equivalent in 000s)						
	Year 1	Year 2	Year 3	Year ...	Year n	Avg.	Avg. Ratio
<b>Information from Balance Sheet</b>							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
<b>Information from Income Statement</b>							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

--

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

*Form FIN – 3.2***Average Annual Turnover**

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

Annual turnover data (construction only)		
Year	Amount and Currency	US\$ equivalent
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
*Average Annual Construction Turnover	_____	_____

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

**Form FIN3.3**  
**Financial Resources**

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in Section III (Evaluation and Qualification Criteria)

Source of financing	Amount (US\$ equivalent)
1.	
2.	
3.	
4.	

## Experience

### General Experience

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

Starting Month / Year	Ending Month / Year	Years*	Contract Identification	Role of Bidder
_____	_____	_____	Contract name: Brief Description of the Works performed by the Bidder: Name of <i>Employer</i> : Address:	_____
_____	_____	_____	Contract name: Brief Description of the Works performed by the Bidder: Name of <i>Employer</i> : Address:	_____
_____	_____	_____	Contract name: Brief Description of the Works performed by the Bidder: Name of <i>Employer</i> : Address:	_____
_____	_____	_____	Contract name: Brief Description of the Works performed by the Bidder: Name of <i>Employer</i> : Address:	_____
_____	_____	_____	Contract name: Brief Description of the Works performed by the Bidder: Name of <i>Employer</i> : Address:	_____
_____	_____	_____	Contract name: Brief Description of the Works performed by the Bidder: Name of <i>Employer</i> : Address:	_____

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

**Form EXP – 2.4.2(a)**  
**Specific Experience**

Bidder’s Legal Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 JVCA Partner Legal Name: \_\_\_\_\_ Bidding No.: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_ pages

<b>Similar Contract Number: ___ [insert specific number] of ___ [insert total number of contracts required].</b>	<b>Information</b>		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount	_____		US\$ _____
If partner in a JVCA or subcontractor, specify participation of total contract amount	_____ %	_____	US\$ _____
Employer’s Name:	_____		
Address:	_____ _____ _____		
Telephone/fax number:	_____		
E-mail:	_____		

**Form EXP – 2.4.2(a) (cont.)  
Specific Experience (cont.)**

Bidder’s Legal Name: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_ pages  
 JVCA Partner Legal Name: \_\_\_\_\_

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

## Form EXP – 2.4.2(b)

**Specific Experience in Key Activities**

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

	Information		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	<input type="checkbox"/> Contractor	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount	_____		US\$ _____
If partner in a JVCA or subcontractor, specify participation of total contract amount	_____ %	_____	US\$ _____
Employer's Name:	_____		
Address:	_____ _____ _____		
Telephone/fax number:	_____		
E-mail:	_____		

**Form EXP – 2.4.2 (b)(cont.)**

**Specific Experience in Key Activities (cont.)**

Bidder’s Legal Name: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_ pages

JVCA Partner Legal Name: \_\_\_\_\_

Subcontractor’s Legal Name: \_\_\_\_\_

	Information
Description of the key activities in accordance with Sub-Factor 2.4.2b) of Section III (Evaluation and Qualification Criteria):	

## **Section V - Eligible Countries**

This section contains the list of eligible countries

### Regional

Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Colombia, Dominica, Grenada, Guyana, Haiti, Jamaica, Mexico, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela, Turks and Caicos Islands.

### Non-Regional

Canada, United Kingdom, China, Germany, Italy.

## **PART 2 – *Employer's* Requirements**

## **Section VI - *Employer's* Requirements**

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<b>Supplementary Information .....</b>	<b>6</b>

## **Specifications**

## **Equivalency of Standards and Codes**

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract.

Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Project Manager’s prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Project Manager at least 28 days prior to the date when the Contractor desires the Project Manager’s consent. In the event the Project Manager determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

## **Duration of Works**

**The duration of works is not to exceed eighteen (18) months.**

1. Architectural Specification
2. Civil/Structural Specifications - refer to drawings
3. MEP Specifications - refer to Volume 2

**MATERIALS AND WORKMANSHIP PREAMBLES**

## MATERIALS AND WORKMANSHIP PREAMBLES

Generally	.....	Page No. MW/1
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Metalwork	.....	Page No. MW/21
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Painting and Decorating	.....	Page No. MW/36
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## MATERIALS AND WORKMANSHIP PREAMBLES

### GENERALLY

#### Weights and Measures

- A Weights and measures referred to in this document are those normally in use in Barbados.

#### Calculation of Quantities

- B All work, unless otherwise described, has been measured nett as fixed in position and the Contractor shall allow in his prices for waste, laps, etc. The quantities given are therefore not to be used for the ordering of materials.

#### Dimensions

- C Figured dimensions on drawings shall be followed in preference to scaled dimensions and large scale drawings in preference to small.

#### Manufacturer's Recommendations

- D All branded materials shall be used strictly in accordance with the manufacturer's recommendations or instructions unless otherwise instructed by the Architect. Should the Contractor obtain from the Architect recommendations or instructions varying from the manufacturer's, he shall notify the Architect in writing and obtain his written approval before proceeding with the work. The Contractor shall be responsible for obtaining from manufacturers all relevant details regarding the use of their products and shall allow for all costs in connection therewith.

Where a manufacturer's name or the proprietary name of an article appears in this document, it is given as an indication to tendering contractors of the standard and description required and contractors may quote for any manufacturer's article, provided it is of the standard and description specified and approved by the Architect in writing prior to the submission of the tender.

#### Protection

- E Where an item is measured for protection, the Contractor is to include for all labour and materials necessary to protect finished work for which payment has been made in interim certificates from damage of any kind. Where the Architect considers that insufficient protective measures are being taken, the Contractor will be instructed to upgrade the level of protection. The issue of such an instruction will not constitute a variation requiring adjustment of the Contract Sum since the Contractor is assumed to have included in his tender amount for providing sufficient protection.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### GENERALLY (Cont'd)

#### Testing of Materials

- A Where the Contractor is required to carry out tests on materials he is to include within his prices for those items, for the cost of testing together with the cost of delivery, fees payable, preparation of reports, plant and consumable goods.

#### Materials not incorporated in the completed Works

- B Materials which are not to be incorporated into the completed building, for example: formwork materials, will be treated as plant and equipment and will not be paid for in interim certificates as materials on site.

#### Materials and Workmanship

- C Materials and workmanship shall be of the best quality and executed in accordance with proper working practices conforming to the relevant British Standards and Codes of Practice referred to in these Preambles. The works shall be carried out in accordance with the drawings and specifications and the quality and standard of materials and workmanship shall be to the reasonable satisfaction of the Architect.

Accuracy in building shall be in accordance with the permissible values as set out in BS 5606.

#### Setting out the Works

- D The Contractor shall diligently and accurately set out the works in conformity with the contents of BS 5964.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

EXCAVATIONS AND EARTHWORKS

GENERAL

- A The Contractor is referred to the Civil and Structural Specification which is embodied within these preambles for items referring to Excavations and Earthworks.

Definitions

Nature of Ground

- B The Contractor shall be deemed to have inspected the site and examined the soils report to determine the nature of and difficulties which might be encountered during the excavations. No assurance is given that the soils report is typical of conditions over the area of excavation and he must make whatever investigations as he considers necessary to determine to his own satisfaction the nature of excavations to be carried out. Prices for excavations shall include for excavating in all types of material except rock.

Normal Water Level

- C If excavations are to be carried out below the normal water table, the level shall be measured and agreed with the Quantity Surveyor prior to pumping operations being commenced.

Termite Treatment

- D Subterranean termite treatment of the site of the building shall be with the toxicant listed as an emulsion in water at the minimum concentrations listed:

Terrador SC	-	0.05% by weight
-------------	---	-----------------

The toxicant emulsion shall be applied by spray immediately before pouring of concrete at the rate recommended by the manufacturer.

Treatment shall not be carried out when rain is falling or when ground is excessively wet.

A warranty of at least 5 years is required against infestation by subterranean termites, during which period the Contractor shall carry out any remedial work free of charge.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

EXCAVATIONS AND EARTHWORKS (Cont'd)

Rock

- A Rock is defined as any material to be excavated which requires for its removal the use of wedges and levers, compressed air jack hammers or explosives. Prices for excavation are to include for any other material than that defined herein.
- B Both the Engineer and the Quantity Surveyor are to be informed before any excavation in rock is commenced.

BS and CP References

- C BS 6031 Earthworks  
BS 3882 Top soil  
CP 2004 Excavations.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CONCRETE WORK

#### General

- A The Contractor is referred to the Civil and Structural Specification which is embodied within these preambles for items referring to concrete works.

#### Responsibility

- B No approval or acceptance by the Architect or his representative shall in any way relieve the Contractor of his responsibility for the quality of materials and the standard of workmanship in the finished works and for the strength and durability of the finished concrete works.

#### Cements

- C The cement shall be Portland cement complying with BS 12.

All cement shall be delivered in the original sealed containers of the manufacturer. No rebagged cement will be permitted to be brought on to the site.

On no account shall a change in the type or source of supply be permitted during the course of construction and every endeavour shall be made to ensure that the colour of the cement is constant throughout the contract.

#### Labour

- D The Contractor shall employ sufficient skilled and unskilled workers under trained and experienced supervision to ensure that degree of skill necessary to produce the quality of workmanship demanded.

### Finished work to Concrete Faces

#### General

- E After removal of the formwork, no treatment of any kind other than that required for curing the concrete shall be applied to the concrete faces until they have been inspected by the Architect's and Engineer's representatives.

#### Exposed Concrete Faces

- F Unless otherwise specified, all concrete faces to be exposed in the finished works shall be left as struck.

After inspection, all superfluous fins and similar projections shall be carefully removed. No render or other applied finish shall be used to obtain a fair face to the concrete.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CONCRETE WORK (Cont'd)

#### Defective Work

- A Where in the opinion of the Architect or Engineer any of the finished works or the materials or workmanship in any part of the works, does not comply with all the relevant requirements of this specification that part of the works shall be classed as defective work.

All work classed as defective work shall be cut out and removed from the works and replaced to the satisfaction of the Architect and the Engineer.

The extent of the work to be removed and the methods to be used in the removal and replacement of this work shall be in accordance with the Architect's and Engineer's directions. In all cases cutting out of defective concrete work shall be carried back to a satisfactory construction joint before the replacement of defective work and any other work thereby affected is commenced.

#### Qualifications of the SMM

##### Beds or the like laid in Bays

- B Notwithstanding the provisions of the SMM, the description of work laid in bays shall be deemed to include formwork between the bays and for preparing the edges of bays as described in these preambles before the adjacent bays are laid.

##### Steel Bar and Fabric Reinforcement

- C Notwithstanding the provisions of the SMM, the descriptions of steel bar and fabric reinforcement shall be deemed to include bends, hooks, tying wire, distance blocks and ordinary spacers, unless otherwise described.

Notwithstanding the provisions of the SMM, the description of fabric reinforcement shall be deemed to include notching around obstructions.

##### Making Good

- D Notwithstanding the provisions of the SMM, the descriptions of holes and mortices shall be deemed to include making good concrete.

##### Flexible Sheet Membranes

- E No allowance has been made for laps or welts in the measurement of flexible sheet membrane.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CONCRETE WORK (Cont'd)

#### Concrete Prices

- A Prices for concrete shall include for placing in position, vibrating and curing and forming all necessary construction joints. Prices for concrete cast in earth or rock cuts shall include for any additional concrete over the size stated necessitated by the irregularity of the surfaces retaining concrete.

#### Formwork Prices

- B Include in the price for formwork for all cleaning and oiling of forms.

#### C BS and CP References

BS	12		Portland Cement
BS	882	)	Aggregates
BS	1198 - 1201	)	
BS	5328		Ready mixed concrete
BS	3148		Test for water
BS	4027		Sulphate resisting Portland cement
BS	4466		Bending dimensions of bars
BS	4449	)	Steel bars
BS	4461	)	
BS	4482 - 3		Steel fabric
BS	4429 (Part 2	)	Metric sizes of bars
BS	340		Kerbs
BS	368		Paving slabs
BS	1239		Lintels
BS	1881		Concrete test cubes
BS	5642		Coping units
BS	4374		Sills
CP	101		Foundations
CP	102		Protection from ground water
CP	111		Structural recommendations
CP	114		Reinforced concrete for walls
CP	114.100	)	Suspended concrete floors
CP	114.105	)	roofs and staircases
CP	116		Structural use of precast concrete
CP	117		Composite construction in structural steel and concrete

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

CONCRETE WORK (Cont'd)

A Barbados National Standards Institute

BNS 69 Portland Cement

Protection

- B Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn previously accepted work if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills of Quantities for these costs.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

BLOCKWORK

General

- A The Contractor is referred to the civil and structural specification which is embodied within these preambles for items referring to Blockwork.
- B Where sheet damp-proof courses are measured, the requirement that "no allowance in measurement has been made for laps" shall be deemed to be included in the description.
- C Where reinforcement in walls is measured, the requirement that "no allowance in measurement has been made for laps" shall be deemed to be included in the description.

BS and CP References

- |   |              |                              |
|---|--------------|------------------------------|
| D | BS 12        | Portland Cement              |
|   | BS 890       | Limes                        |
|   | BS 1198-1200 | Sand                         |
|   | BS 882       | Aggregate                    |
|   | BS 743       | Damp proof courses           |
|   | BS 5628      | Structural use of masonry    |
|   | BS 4887      | Mortar plasticisers          |
|   | CP 101       | Foundations                  |
|   | CP 012       | Protection from ground water |
|   | CP 111       | Structural recommendations   |
|   | CP 121       | Block walling                |

Barbados National Standards Institution

- |   |        |                        |
|---|--------|------------------------|
| E | BNS 69 | Portland cement        |
|   | BNS 38 | Hollow concrete blocks |

Protection

- F Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item is deemed to include for the protection of all finished work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills for these costs.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### ROOFING

#### Testudo Spunbond System

- A The whole surface to be covered shall be primed with an adhesive bituminous coat, ie. a bituminous solution based on oxidised bitumin, additives and solvents which has 50% solids content and a FORD Viscosity no, 4 at 25°C from 20 to 25 sec.

The waterproofing shall consist of a 4 mm thick TESTUDO SPUNBOND 20 membrane with FLAMINA based on elastomers and bitumen modified with polypropylene, reinforced with a continuous single strand extruded polyester non woven isotropic fabric.

The sheets shall have an ultimate longitudinal and transverse tensile stress of 80 Kg/5 cm and 70 Kg/5 cm respectively, a length and transverse ultimate elongation equal to 50% a hydraulic pressure resistance to burst on free discs including a 177 cm<sup>5</sup> ie. 3 Kg/cm<sup>5</sup> surface and a high resistance to 1000 fatigue cycles on active slit opening 3mm in both directions.

A cap sheet of MINERAL DEFEND 3.5 Kg should be placed parallel with and astride the overlaps of the previous layer. Fixing must be by fully flame welding to the lower surface, allowing for 10 cm overlaps and then being turned and flame welded on the vertical section to a minimum height of 20 cm above the maximum water level.

A five year guarantee is to be provided.

#### Metal Roof Sheeting

- B Colourclad roof sheeting shall be 24 gauge with a minimum of PVF 2 Finish comprising 5 microns anti-corrosion primer with 20 microns PVF 2 finishing on both sides of the sheeting. The colour shall be white.

The roof sheets shall be fixed to wood purlins with wood grip fasteners (self-drilling 12" long spaced every 12" along the purlin.

The roof sheets shall be fixed to steel purlins with metal fasteners (self-drilling) 12" long spaced every 24" along side lap and 12" along the purlin.

Fasteners shall have the pre-painted to match the roof sheeting.

Roof sheeting shall be installed completely with all flashings, ridge, hip coverings, eaves strips, etc., and shall be left complete watertight on completion.

A ten year guarantee is to be provided.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

ROOFING (Cont'd)

Protection

- A Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn previously accepted work if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item measured under Clause M61 of the SMM is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills of Quantities for these costs.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CARPENTRY AND JOINERY

#### Timber Generally

- A Timber shall be sound with reasonably straight grain and at least 85% heartwood, free from large shakes, waney edges splits, loose or dead knots, worm, rot, fungus, decay or infestation.

#### Pitch Pine

- B Pitch pine shall be best imported quality of mature growth, free from gross defects, well seasoned and having a minimum density of 673 Kgs/m<sup>3</sup> and an average equilibrium moisture content of 10 per cent in accordance with BS 1186 Part 1.

#### Hardwood

- C Purple heart, mahogany and green heart shall be the best quality available and must be free from gross defects. The Contractor must exercise care in selecting this timber and shall notify the Architect and obtain his written approval of the type and sources of the hardwoods he proposes to use.

#### Treated Timber

- D Treat softwood against termite attack and decay damage by wolmanising or similar pressure/vacuum impregnation with an approved preservative in order to obtain a minimum net chemical retention of 8.01 Kgs/m<sup>3</sup> of timber in accordance with the manufacturer's instructions and thereafter either air dry or kiln dry all timber to the satisfaction of the Architect. Provide a certificate of treatment from the timber suppliers if requested by the Architect.

Where cross cutting or boring of treated timber is unavoidable, liberally swab or dip treat all exposed faces with an approved preservative. Where timber is described as having a natural oiled or varnished finish, an approved clear preservative shall be site applied to the approval of the Architect.

Wood preservation is to be in accordance with BS 4072.

#### Plywood

- E Plywood shall conform to BS 6566 and marine plywood shall conform to BS 1088.

Where plywood is to have a natural or varnished finish, Grade 1 shall be used.

Where plywood is to be painted, Grade 2 may be used.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CARPENTRY AND JOINERY (Cont'd)

#### Tolerances

A All structural timbers shall be sawn timbers to the section given on the drawings. Permissible tolerance on cross section dimensions will be 1/4" and 1/8" with no allowance for wane.

#### B Exposed Faces

Timber which is to be exposed in the finished work shall be 'dressed' unless otherwise described. The term 'dressed' where used in this document shall mean the hand selection of timber members and site preparation by means of planer and/or belt sander.

NB: Where the term 'nominal size' is used in this document, it shall mean the sawn size and where timbers are to be wrought or dressed 3mm shall be allowed from the nominal size for each wrought face or edge.

#### C Plastic Laminate

Plastic laminate shall be 2mm 'Formica', 'Arborite' or equal and approved and comply with the BS 3794 and be bonded to plywood or timber backing with synthetic resin adhesive to BS 1204 strictly in accordance with the manufacturer's printed instructions.

#### Solid Surfacing

D Solid surfacing shall be 1/2" thick Wilsonart Gibraltar or 1/8" Wilsonart SSV fixed to 1/2" thick chipboard backing.

#### E Joinery Work

All joinery work shall be carried out in accordance with BS 1186, Part 1 & 2.

#### F Carpentry Work

All carpentry work shall be carried out in accordance with CP 112.

#### G Natural Finish

When natural finish or finish for staining, clear polish or varnishing is specified, the timber in adjacent pieces shall be selected and matched to be uniform and symmetrical in colour and grain.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CARPENTRY AND JOINERY (Cont'd)

#### A Fixings

All fixings, plates, shoes or straps shown on the drawings shall be neatly formed out of mild steel plate drilled and welded as necessary. Prior to erection, all mild steel components shall be wire brushed and primed with one coat of red zinc chromate primer. All surfaces in contact with wood shall be painted a further two coats of bituminous paint. All fixing accessories shall conform to BS 1494.

#### B Ironmongery

Provide samples of all ironmongery for selection by the Architect without charge.

Carefully wrap and protect all ironmongery until completion of the work and replace any which may be defaced or damaged without charge as the Architect shall direct. Oil all locks and adjust and leave in perfect working order on completion and properly label all keys and deliver up in accordance with the Architect's instructions.

Fix all ironmongery with screws of the same metal and finish as the fitting themselves. Remove and replace with new ones all screws damaged when driven by the turn screw or from any other cause.

Remove all ironmongery when painting or carrying out other works likely to damage the fittings and replace on completion.

#### C Door Frames and Doors

Door frames shall be constructed to conform with BS 1567 and BS 4748 Part 1, and where frames are to be painted, shall be primed on all faces prior to fixing.

Doors shall be constructed in the joinery shops of the Contractor or by a specialist joinery manufacturer and not upon the site. Timber for use in doors shall be specially selected for straightness and freedom from faults, tenoned, glued and wedged or pinned together.

Furnish the owner with an extended guarantee to warrant wood framed doors solid core flush wood doors against warping, twisting, core ghosting, swelling, sagging, splitting and delamination for a period of three (3) years from the date of the certificate of Practical completion of the work.

#### D External Doors

External doors shall conform to BS 459 and BS 4787. Framing shall comprise 100mm wide stiles top and bottom rails, securely tenoned and glued together having intermediate rails filling 60% of the core void. Plywood facings shall be in accordance with BS 1186 and 4mm thick. Facings shall be glued to framing with Type WPB glue to BS 1204.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CARPENTRY AND JOINERY (Cont'd)

#### A Internal Doors

Internal doors shall conform to BS 459 and BS 4787. Framing shall comprise 100mm wide stiles, top and bottom rails securely tenoned and glued together having intermediate rails filling 40% of the core void. Plywood facings shall be in accordance with BS 1186 and 4mm thick. Facings shall be glued to framing with Type MR glue to BS 1204.

#### Hollow Metal Doors

- B Hollow metal doors as manufactured by S.W. Fleming Limited, or approved equal, slab type constructed of not lighter than 16 gauge (1.6mm) steel with solid fiberglass core. Face sheets and all internal components to be made with A40 paintable galvanneal steel. The doors shall be flush faced with no face seams, and having continuously welded edge seams on all edges, weld 20 gauge (90mm) interlocking stiffeners at 6" (150mm) centres.

The door frames: single piece welded frames of pressed steel with mitred corners of approved manufacture to suit details on the drawings, from not lighter than 16 gauge (1.6mm)

Build units square, true, accurate to size, free from distortion, waves, twists, buckles or other defects detrimental to appearance and performance. Provide all holes for connections and fastenings.

Continuously weld corners and joints of metal doors along the inside. Grind smooth and flush.

Reinforce hollow metal doors and door frames and prepare for hardware application in the shop. Reinforce frames for door closer or holder bracket. Cover reinforcement plates or attachments and cutouts with light metal boxes to protect against mortar.

Provide channel or angle spreaders (2 per frame) at the bottom of door frames to ensure proper alignment, with removable spreaders.

Where metal frames are to be built into masonry provide three adjustable "TEE" anchors for each jamb under 2.1m (6'10"), four anchors for jambs over 2.1m high.

Reinforce head of frames wider than 1.2m (4'0").

Prime paint hollow metal doors, frames and accessories after fabrication with one coat of baked-on rust inhibitive primer.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

CARPENTRY AND JOINERY (Cont'd)

Detention Grade Metal Doors

- A Detention doors shall be as manufactured by Apex Industries Inc., or equal and approved. Doors shall be 50mm thick constructed of 12ga steel flush faced with no seams, continuously welded edge seams.

Window Frames and Windows

- B Windows shall be constructed to conform with BS 644 and where frames are to be painted, shall be primed on all faces prior to fixing.

Windows shall be constructed in the joinery shops of the Contractor or by a specialist joinery manufacturer and not upon the site. Timber for use in doors shall be specially selected for manufacturer and not upon the site. Timber for use in doors shall be specially selected for straightness and freedom from faults, tenoned, glued and wedged or pinned together.

Furnish the owner with an extended guarantee to warrant window frames and windows warping, twisting, core ghosting, swelling, sagging, splitting and delamination for a period of three (3) years from the date of the certificate of Practical Completion of the work.

- C Storage of Materials

Materials shall be protected from the weather during transit to the site and shall be stored clear of the ground in a clean, dry, ventilated enclosed structure.

Where timber for carpentry and joinery work is incorporated into the works, the Contractor is to ensure that adequate protection is provided to prevent staining or damage caused by inclement weather or other causes.

BS and CP References

- |   |                     |                                 |
|---|---------------------|---------------------------------|
| D | BS 1202             | Nails                           |
|   | BS 1494             | Fixing accessories              |
|   | BS 1579             | Connectors for timber           |
|   | BS 1860             | Strength of structural softwood |
|   | BS 4174             | Drive screws                    |
|   | BS 1297             | Softwood flooring               |
|   | BS 4471 Part 1      | Softwood                        |
|   | BS 4471 " 2         | Wood battens                    |
|   | BS 1186 Parts 1 & 2 | Quality of timber in joinery    |
|   | BS 1210             | Wood screws                     |
|   | BS 1455             | Plywood                         |
|   | BS 1088             | Plywood, marine                 |

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CARPENTRY AND JOINERY (Cont'd)

#### BS and CP References (Cont'd)

BS 3493	Information about plywood
BS 3842	Preservatives for plywood
BS 584	Wood trim
BS 644	Windows
BS 4787 :459	Doors
BS 1567	Door frames and linings
BS 5212	One part gun grade polysulphide based sealants
BS 585	Stairs
BS 1195	Kitchen fitments
BS 1292	Storage fitments
BS 5756	Tropical hardwood
BS 6375	Performance of windows
BS 4190	Isometric black bolts, screws and nuts
BS 4072	Wood preservation
CP 98	Preservative treatments
CP 112	Structural use of timber
CP 201 Part 1	Wood flooring
CP 151 " 2	Doors, windows and frames.

#### Generally

- A The work is to be framed as soon as possible after the Contract is signed and it is to be kept in a dry place under cover and arranged so that a current of air can freely circulate around it but must not be wedged up until required for fixing. Should any joints give or open in the least before the maintenance period has expired, such defective joinery is to be taken down, refitted and redecorated or replaced by new joinery as the case may be and all work disturbed made good at the Contractor's expenses.

#### Construction

- B The Contractor shall be responsible for sound construction of components using recognised forms of joints in appropriate positions where these are not specified. Joints shall be in accordance with BS 1186 Part 2. In framed work all joints shall be mortice and tenon, wedged and glued where required. Faces of members jointed shall be flush with one another when intended to be so.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### CARPENTRY AND JOINERY (Cont'd)

- A Exposed timber shall be secret nailed wherever possible. Where it is not possible to secrete nail, nails shall be punched below the surface and the depression filled flush with putty and sanded off.

#### Carpentry Generally

- B The whole of the carpentry work is to be framed, fixed and executed in the best and most workmanlike manner. Joints shall be so placed that knots do not occur in tension zones.

The word 'framed' is to be understood as including all the best methods of jointing woodwork together by mortice and tenon, dovetail or other method.

In addition, the quality of workmanship for structural timber shall be not less than that recommended in CP 112 Part 5, as modified by any specific requirements given in this Specification.

#### Joinery Generally

- C The quality of workmanship shall be not less than that set out in BS 1186 Part 2, as modified by any specific requirements given in this Specification.

Nails, sprigs, etc., shall be punched below the surface; holes shall be stopped with putty or other equal and approved filler specially selected to match colour and texture of timbers which are to be polished, etc.

Screws (other than brass screws with cups) shall be countersunk head wood screws driven to 1/12" below the surface. Screw heads in work for painting shall be stopped in putty or other equal and approved filler before any trace of rust appears; all rusted screws shall be replaced before painting. Screw heads in work described as flush pelltated shall be let in at least 1/4" below the surface and pelltated in grain with matching hardwood glued in.

Cross tongued joints shall be glued.

All joinery that is to be painted shall be knotted and primed with the primer before being fixed. This applies particularly to the 'covered up' or 'hidden' parts of joinery work. All external joinery work shall be put together in a thick mixture of red or white lead and linseed oil or waterproof adhesive. The arrangement, jointing and fixing of all joinery works shall be such that shrinkage in any part and in any direction shall be compensated in the joints and shall not impair the strength and appearance of the finished work and shall not cause damage to contiguous materials or structures.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

CARPENTRY AND JOINERY (Cont'd)

Framed Joinery

- A Joinery work described as 'framed' shall be jointed using mortice and tenon, combed or dovetail joints only.

Construct joinery exactly as shown on the Architect's details. Where joints are not specifically indicated they shall be the recognised forms of joints for each position.

Surface Finish on Joinery

- B The surface finish on joinery shall be such that if properly finished with a gloss paint, imperfections in manufacture will not be apparent.

Double Tenons

- C Lock rails shall have double tenons.

Cutting back Tenons

- D Tenons in the edges of door stiles to receive clear finish shall be cut back 1/4" and made good with matching wood.

Door Frames and Linings

- E Door frames and linings shall be constructed in accordance with BS 1567 and BS 459 Part 3, except that profiles and sizes of individual members shall be as detailed.

Priming before Fixing

- F Priming of (or first coat of clear treatment on) joinery before fixing has been specified in the painting section but rates for joinery shall include for priming, lacquering or varnishing (as appropriate) any surface exposed by cutting and fitting.

Tolerances

- G All structural timber shall be sawn timbers to the sections given on the drawings. Permissible tolerances on cross-section dimensions will be plus 1/4" and minus 1/8" with no allowance for wane.

Provide reasonable tolerance at all connections between joinery work and the building carcass so that any irregularities, settlements or other movements shall be adequately compensated for.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

CARPENTRY AND JOINERY (Cont'd)

Shrinkage

- A Arrange, joint and fix all joinery work in such a manner that shrinkage in any part and in any direction shall not impair the strength and appearance of the finished work and shall not cause damage to adjoining material or structure.

Fixing to Blockwork or Concrete

- B Where timber is described as plugged or fixed to blockwork or concrete it shall include for cutting holes as required and for supplying and fixing wooden plugs treated with termite fluid. Alternatively, plugs may be 'Rawlplug' or other approved proprietary make. The use of any approved system of fixing to blockwork or concrete with special nails, screws or bolts, inserted with spring cartridges or power tools will be permitted in lieu of plugging.

Protection

- C Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills for these costs.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### METALWORK

#### General

- A Mild steel plates, bars, sections, tubes, etc., shall conform to BS4360.

The surface of steel shall be smooth, clean and free from rust. Loose rust and scale shall be removed from the steel prior to despatch from the works, and any subsequent accumulation of dirt, oil or grease shall be cleaned off immediately prior to erection.

#### Welding

- B Weld by an approved method using suitably qualified operatives to give ductility and tensile strength comparable with that of the metal joined.

Grind all soldered or welded joints, seams, etc., to a smooth finish, remove all rough edges and leave the whole perfect to the satisfaction of the Architect.

#### Forged Work

- C Clean all forged work and put together in the best and most workmanlike manner, drill all holes and clear off burrs and ensure that all counter-sinkings are concentric and threads and tappings are accurately fitted.

#### Bolts

- D All bolts unless otherwise described shall be BS Whitworth black bolts with hexagonal heads and nuts and round washers. Use splayed washers where necessary to effect tight joints.

#### Fixing

- E Form all mortices, chases, etc. and securely anchor to the structure all metalwork and make good the surfaces to which they are fixed.

#### Leave Clean

- F Clean all exposed metal surfaces on completion with water or an approved petroleum product such as methylated spirit or kerosene. Make good any damage caused by the use of an improper cleaning material. Painting of metal work is described in the Painting and Decorating Section of these Preambles.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

METAL WORK (Cont'd)

BS and CP References

A	BS 4190	Bolts
	BS 4360	Weldable structural steels
	BS 1387	Steel tubes and tubulars
	BS 729 (Part I)	Galvanizing.

Protection

- B Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills for these costs.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### FLOOR, WALL AND CEILING FINISHES

#### General

- A Where a manufacturer's name or the proprietary name of an article appears in this section, it is given as an indication to tendering contractors of the standard and description required and contractors may quote for any manufacturer's article, provided it is of the standard and description specified and approved by the architect in writing, prior to the submission of tender.

#### Vinyl Tiles

- B Vinyl floor tiles shall be vinyl tiles to BS 3260 laid with an approved adhesive all in accordance with the manufacturer's printed instructions and with CP 203. On completion of the works the tiles are to be thoroughly cleaned and two coats liquid floor polish applied.

#### Porcelain/Ceramic Tiles

- C Porcelain/Ceramic tiles shall be unglazed to BS 6431 Parts 2 & 6, and shall be laid in accordance with BS 5385. Tiles shall be laid with BAL-CEM GOLD STAR cement based tile adhesive to BS 5980, possessing Class AA water resistance with BAL-ADMIX ADI additive. Joints between tiles shall be a constant width 3 mm wide.

Floor tiles shall be grouted with BAL-EPOXY GROUT WF. The joints shall be completely filled.

BAL products are manufactured by Building Adhesives Limited, Longton Road, Trenthan, Stoke-on-Trent, Tel. 0782 859921: Fax 0782 643909.

The manufacturer's printed instructions must be strictly adhered to.

#### Cement/Sand Bed

- D Screeds shall be laid in accordance with CP 204.

Mix screeds of cement and sand (1:4) and lay to the thickness described. Finish screeded beds with a rough surface to receive ceramic tiles and a steel trowelled surface to receive vinyl asbestos tiles, ceramic tiles when fixed with approved adhesive and floor paint. Thoroughly brush clean surfaces to receive screeds of all foreign matter and well soak prior to laying screed.

Provide an adequate bond between screeds and in-situ concrete by the use of an approved concrete bonding agent or by well hacking, wetting and applying cement grout immediately prior to laying the screed.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### FLOOR, WALL AND CEILING FINISHES (Cont'd)

An approved hardener is to be added to the cement/sand mix such as 'Cementone No. 8' 'Lithurin' or other equal and approved.

Beds shall be laid in bays not exceeding 375 square feet. Edges of adjoining bays shall be well hacked and wetted prior to laying the next day. Immediately the beds are laid, they shall be cured and protected for at least five days to prevent damage or shrinkage of any kind. The method of curing is to be approved by the Architect.

#### Levels Generally

- A Ensure that the levels of floors within any one area and between adjoining areas are constant unless specifically described or shown to be otherwise. Make up for any variations in the thickness of precast or premoulded floor finishings and irregularities in the surface of the structural base by adjusting the thickness of the screed as necessary.

#### Protection

- B Protect all premoulded floor finishings from walking or other disturbance for five days after laying.

Cover all floors up to the completion of the works with a temporary covering approved by the Architect. On completion of the works, remove covering, clean off stains and mortar splashes, etc., from the floors and leave perfect for handing over.

#### Wall Finishes:

##### Rendering

- C Mix rendering of cement and sand (1:4) including a plasticiser additive at the rate as detailed in the manufacturer's printed instructions.

Proportion materials by measure and not by estimation and provide proper approved measuring boxes for this purpose. Make up mix on site in a close boarded wood platform with upstand edges.

Where approved mechanical batch mixers are employed, rotate each batch in the drum at least two minutes and use immediately thereafter.

Mix only quantities which can be used at once and reject rendering which has begun to set before being required.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### FLOOR, WALL AND CEILING FINISHES (Cont'd)

Carefully float all work and finish to the stated thicknesses with surfaces perfectly flat to stand the straight edge every way, free from all cracks and leave perfectly clean. External angles shall be true and slightly rounded.

#### Walls

- A 'Throw' all rendering and plaster onto the wall and give the minimum of 'working' to ensure a plumb and even finish.

Complete each section of walling in one operation but where this is not possible, the existing edge shall be well hacked and wetted before recommencing operations. Throughout the whole of the works, order sufficient sand to prevent any discrepancy between the quality of different renderings.

Thoroughly prepare and set all surfaces prior to commencement of operation and allow for any additional thicknesses required in dubbing out and for working around and behind pipes with their connections and fixtures. An approved filler shall be applied to the surface of internal and external plasterwork to obtain a smooth surface suitable to receive the finishing decoration.

The raking out of joints or hacking faces of blockwork to provide a key for rendering have been referred to in the Blockwork section of these preambles. The prices for rendering on concrete surfaces shall include for hacking the face of concrete to provide a key.

#### Glazed Wall Tiling

- B Glazed wall tiles shall be of sizes and thicknesses specified and shall be accurately fixed to floated backing with cement and sand (1:5) and grouted with white cement. Alternatively, tiles may be fixed with an approved tile adhesive and grouted with white cement. All tiles shall be of the cushion-edge type. All external angles shall be rounded edge tiles of radius approved by the Architect. Tiles shall be in accordance with BS 1281 and BS 5385, Part 1.

- C Plasterboard

Gypsum wall board to BS 1230 Part 1 type 1 shall be taper edged boards fixed with plasterboard screws or flat head nails as BS 8212 Clause 6.3. Boards shall be as manufactured by British Gypsum Limited and shall be installed in accordance with BS 8212 and the manufacturers printed instructions. Wall boards shall be jointed by applying jointing compound to the depression between the boards, firmly embedding the jointing tape, covering it with the jointing compound and striking off flush. Finishing compound shall be applied over the joint and feathered out approx. 2". This process shall be repeated and feathered out a further 2" beyond the first application, finished flush and smooth. Nail holes shall be filled and finished flush.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

FLOOR, WALL AND CEILING FINISHES (Cont'd)

Textured Ceiling Finish

- A The underside of fair face concrete slabs shall be rubbed smooth to remove all projections and all small voids are to be filled with an approved filler.

Textured ceiling finish shall be 1mm interior grade white Berger textured finish or other equal and approved by the Architect.

Suspended Ceiling Systems

- B The suspended ceiling system shall be acoustical non-combustible mineral fibreboard with standard type suspension hung directly from concrete soffits.

The suspended ceiling system shall be installed in accordance with CP 290 by skilled workmen. The suspension systems shall be supported by No. 12 gauge steel hanger wires secured to the concrete soffit and the exposed grid framing shall be securely fixed to the hangers. The lay-in panels shall be set loose within the grid and care shall be taken not to stain or damage the panels on the exposed face or on the edges. The installation must be carried out in accordance with the Manufacturer's written instructions, all to the satisfaction of the Architect.

The panels shall have factory applied washable white vinyl latex paint finish.

The suspension system shall be exposed grid type with electro-galvanised steel framing finished on exposed surface with low sheen satin white enamel.

Spares

- C The Contractor is to supply the Employer at practical completion of the works with the following spares:

- |                                |   |                |
|--------------------------------|---|----------------|
| - Floor and Wall Ceramic tiles | - | 2% of quantity |
| - Suspended ceilings:          | - | 1 box tiles    |
| - Carpet tiles                 | - | 2 boxes        |
| - Vinyl tiles                  | - | 1 box          |

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

FLOOR, WALL AND CEILING FINISHES (Cont'd)

BS and CP References

A	BS 12	Portland Cement
	BS 1199	Sand for screeds and plaster
	BS 1369	Metal lathing
	BS 1246	Glazed wall tiles
	BS 5262	External rendering
	BS 5492	Internal rendering
	BS 5385	Internal wall tiling
	BS 8212	Dry linings
	BS 5325	Installation of textile floor coverings
	CP 202	Inflexible floor tiling
	CP 203	Flexible floor tiling
	CP 204	In-situ floor finishes
	CP 290	Suspended ceilings

Protection

- B Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills of these costs.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### PLUMBING INSTALLATION

#### Generally

- A The whole of the work shall be carried out in accordance with the Byelaws and Regulations of the Sanitary Water and Gas Authorities and to the entire satisfaction of their inspectors.

The entire plumbing and drainage installation shall be carried out by experienced craftsmen under the supervision of a competent foreman to the entire satisfaction of the Architect.

#### Rainwater Pipes and Fixtures

- B Rainwater pipes and fittings shall conform to BS 4576 Part 1, with spigot and socket joints and neoprene sealing gaskets conforming to BS 2494 Part 2.

All pipes for use as soil and waste pipes shall comply with the provisions of BS 4514 and those for cold water service pipes with BS 3505. Fittings shall be of the solvent weldable type. Brackets and clips shall be of non-ferrous metal or PVC coated steel. Traps shall comply with the provisions of BS 3943 and have a 75mm deep seal.

#### PVC Pipes

- C PVC pipes for use as soil and waste pipes shall comply with the provisions of BS 4514 and those for cold water service pipes with BS 3505. Fittings shall be of the solvent-weldable type. Brackets and clips shall be of non-ferrous metal or PVC coated steel. Traps shall comply with the provisions of BS 3943 and have a 75mm deep seal.

#### Polythene Pipes

- D Polythene pipes for use as cold water service pipes shall comply with the provisions of BS 1972 or BS 3284. Fittings shall be of the solvent weldable type. Brackets and clips shall be of non-ferrous metal or PVC coated steel.

#### Galvanized Steel Pipes

- E Galvanized steel pipes shall comply with the provisions of BS 1387. Fittings, clips, brackets and hangers shall be galvanized steel, wrought or malleable iron. Joints shall be screwed and socketed. Unless otherwise described, pipes shall be of medium weight (blue band). Lightweight (brown band) pipes shall not be used.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### PLUMBING INSTALLATION (Cont'd)

#### Copper Pipes

- A Copper pipes shall be light gauge pipes complying with the provisions of BS 2781 Part 1, underground pipes complying with the provisions of Table Y. Fittings shall either be of the capillary type (Yorkshire, Wendesbury or equal) or 'compression' type (Securex or equal) as described and conforming with BS 864 Part 2. Alternatively, fittings may be site made and bronze welded provided that this is carried out by thoroughly experienced workmen. Pipe clips, brackets and hangers shall be of copper, brass, bronze or gun metal.

#### Stainless Steel Pipes

- B Stainless steel pipes shall comply with BS 4127 Part 2. Fittings shall be either capillary or compression type as specified for copper pipes.

#### Valves

- C All valves, taps, cocks, etc., shall be fullway and comply with the provisions of BS 1010 where applicable. They shall be fixed so as to be easily accessible and so that re-washing may be carried out without the necessity for cutting away walls, etc.

#### Bending Pipes

- D Wherever possible, bends shall be made in the run of the pipe. Bending springs, sand loading or other suitable means shall be employed to ensure a true diameter all round the length of the bend.

#### Fixing Pipes

- E Soil waste and overflow pipes shall be fixed vertically or at 221 from the horizontal. Water pipes shall be fixed vertically or with slight falls towards draw-off points to facilitate draining off of the system. Overflow pipes shall be fixed to discharge in readily observed positions.

#### Workmanship

- F All plumbing work shall be carried out by skilled workmen and by or under the supervision of a licensed Sanitary Contractor and in conformity with the Regulations of the Sanitary and Water Authorities. Installation shall comply with CP 304 for Soil and Waste Pipes above ground, with CP 310 for Water Service and Distribution Pipes and with CP 312 for Plastic Pipework.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

PLUMBING INSTALLATION (Cont'd)

Testing

- A The testing of pipework and fittings shall be carried out to the satisfaction of the Architect and Sanitary and Water Authorities. The Contractor is to include in his prices for testing which shall include for supplying all necessary appliances, water and attendance.

Cutting, Patching, Repairing, etc.

- B The Plumbing sub-contractor shall furnish the Contractor with the sizes and locations of chases and openings in walls, partitions, etc., before they are built. The Contractor shall furnish and install, without delay in the execution of the work of other trades, the sleeves or boxes in the form of floor slabs for all his pipes before the floor slabs for all his pipes before the floor slabs are poured.

The Contractor shall do all drilling required for the installation of hangers.

All cutting of walls, partitions, floors, etc., required for the installation of work called for under this section, will be done by the Contractor. Cutting of structural members shall not be done without the approval of the Architect. All patching will be done by the General Contractor. Any cutting or patching required in connection with the installation of this work, due to errors on the part of the Plumbing sub-contractor, shall be paid for by him.

Excavation and Backfilling

- C The Contractor shall do all excavating and backfilling necessary to the installation of work, including the patching and repair of pavements, shall provide all sheeting and shorting required to perform and protect the excavations and to safeguard employees and shall remove from the premises all rubbish and surplus earth occasioned thereby. Trenches shall not be backfilled until the facilities therein have been tested and the work has been accepted as tight.

BS and CP References

- |   |                  |  |
|---|------------------|--|
| D | BS 864           | Capillary and compression type fittings of copper and copper alloy |
|   | BS 1010          | Draw-off valves and stop valves                                    |
|   | BS 1387          | Steel tubes  |
|   | BS 1415          | Mixing valves  |
|   | BS 1972          | Polythene pipe for cold water services                             |
|   | BS 2494 (Part 2) | Neoprene gaskets   |
|   | BS 2871 (Part 1) | Copper tubes   |
|   | BS 3284          | Polythene pipe for cold water services                             |

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

PLUMBING INSTALLATION (Cont'd)

BS and CP Reference (Cont'd)

BS 3505	U PVC pipe for cold water services
BS 3943	U PVC traps
BS 4346	Joints and fittings PVC pipes
BS 4515	U PVC soil and waste pipes
BS 4576 (Part 1)	Rainwater pipes and fittings
CP 304	Soil and waste pipes
CP 310	Water supply
CP 312	Plastic pipework

Barbados National Standards Institution

A BNS CP 16 (Part 1).

Protection

B Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills for these costs.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

ELECTRICAL INSTALLATION

Regulations

- A All electrical work shall be carried out in strict conformity with local regulations and a certificate of test from the Government Electrical Inspectorate shall be handed to the Architect by the Main Contractor at completion of the work.

Drawings

- B Drawings and/or diagrams giving details of the circuits, panel boards, etc., as installed shall be prepared by the Contractor or nominated sub-contractor and 2 copies handed to the Architect at completion of the work.

Where an Electrical sub-contractor has been nominated, the sub-contract amount shall be deemed to include for the preparation of the aforementioned drawings.

Cutting, Patching, Repairing, etc.

- C The Electrical sub-contractor shall furnish the Contractor with the sizes and locations of chases and openings in walls, partitions, etc., before they are built. The Contractor shall furnish and install, without delay in the execution of the work of other trades, the sleeves or boxes in the forms of slabs, beams and columns for all conduit and fittings before concrete is poured.

The Contractor shall do all drilling required for the installation of hangers, supports, etc.

All cutting of walls, partitions, floors, etc., required for the installation of work called for under this section, will be done by the Contractor. Cutting of structural members shall not be done without the approval of the Architect. All patching will be done by the General Contractor. Any cutting or patching required in connection with the installation of this work due to errors on the part of the Contractor or Electrical sub-contractor shall be paid for by him.

Excavation and Backfilling

- D The Contractor shall do all excavating and backfilling necessary to the installation of the work, including the patching and repair of pavements; shall provide all sheeting and shoring required to perform and protect the excavations and to safeguard employees and shall remove from the premises all rubbish and surplus earth occasioned thereby. Trenches shall not be backfilled until the facilities therein have been tested.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

ELECTRICAL INSTALLATION (Cont'd)

Protection

- A Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item measured under Clause T43 of the SMM is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that the Contractor has included elsewhere in the Bills for these costs.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

GLAZING

Generally

- A Glass shall be obtained from an approved manufacturer and shall conform to BS 952. All glass shall be delivered in proper containers with maker's name, guarantee, type of glass and thickness or weight of glass attached to the outside of the containers. The work shall be carried out in accordance with BS 6262.

Sheet glass

- B Sheet glass shall be selected glazing quality (SQ) and of the weights and thicknesses stated.

Float and Plate glass

- C Float glass and plate glass shall be of the thicknesses stated and be perfectly flat and true.

Wired glass

- D Georgian wired glass shall be 3" thick and be perfectly flat and true. When set in position, the wires shall be perfectly horizontal and vertical and align with those of adjacent panes.

Glazing

- E Cut glass to sizes required as measured on site with a small clearance and set plumb, square, level and at their proper elevation and plane and locate in proper alignment with other work. Cut louvre blades to sizes specified and polish arrised edges. The Contractor is to allow for cleaning all stains from the glass both inside and out and for leaving perfect to the satisfaction of the Architect.

All glass and timber fixing beads are to be fully bedded in mastic compound.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

GLAZING (Cont'd)

Mirrors

- A Mirrors shall be of selected quality polished plate glass silvered and enamelled after cutting, polishing edges and drilling. Fix mirrors with chromium plated dome headed screws and plastic washers to walls with 3/8" thick plywood backing, lipped all round with hardwood lipping.

BS and CP Reference

BS 952	Glass for glazing
BS 4315 Part 1	Methods of test for resistance to air and water penetration
BS 5215	One part gun grade polysulphide based sealants
BS 544	Linseed oil putty
BS 6262	Glazing of buildings
CP 145	Patent Glazing.

Protection

- B Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item, is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that Contractor has included elsewhere in the Bills for these costs.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

PAINTING AND DECORATING

Generally

- A All painting shall be carried out in accordance with BS 6150.

All materials used unless otherwise stated, shall be anti-fungus.

Supply paints on site in sealed cans bearing the manufacturer's name and all thinning, mixing, etc., shall be in accordance with the manufacturer's instructions.

Produce vouchers as and when required by the Architect to prove to his satisfaction that all materials supplied are genuine and as specified herein.

Preparation

- B Thoroughly dust and clean down all surfaces to be painted, cut out and fill cracks, stop holes, treat knots and resin pockets in wood with two coats knotting varnish and clean steelwork of rust, oil, grease, scale and moisture, all in accordance with approved practice. Apply an approved filler to the surface of internal plasterwork to provide a smooth surface where painting is specified.

Previously painted surfaces must be thoroughly cleaned to remove all dirt, grease, etc. All loose and flaking material to be rubbed down with a fine grade sandpaper and touch primed.

Aluminium and zinc must be washed with a detergent to remove all grease and treated with a self etching primer.

Before applying polyurethane varnish or wood stain, the wood must be perfectly dry and rubbed down with fine sandpaper to remove all dust and debris to provide a smooth, clean surface.

All nail holes and other defects in timber shall be filled with putty or other approved filler after priming and rubbed down to give a smooth surface. The backs of all joinery surfaces, notches, etc., and where areas are to be hidden by the fixing of, metal work shall be primed before these are fixed in position.

Concrete surfaces are to be smooth and even, free from loose sand, mortar splashes and efflorescence with all small voids filled with an approved filler, prior to receiving painted finish. The Contractor is to allow in his price for all such preparatory work.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### PAINTING AND DECORATING (Cont'd)

#### Application

- A Apply paint by brush, roller or spray with the minimum of dilution.

Strain the prepared paint free from skins and similar impurities immediately before application.

Allow to dry and well rub down each coat of paint before the next is applied and no two successive coats shall be to the same tint.

No paint shall be applied to a damp surface and no external painting shall be carried out during wet weather.

Remove metal hardware and fittings before painting to general surfaces and afterwards refix. Alternatively, they shall be adequately protected to prevent being marked by paint.

Allow for carrying out work in such positions and in such order as shall be directed by the Architect.

Cover and protect all surfaces which may become marked by paint and thoroughly clean all surfaces throughout, after completion of the work, all to the satisfaction of the Architect.

On no account shall the Contractor allow employees to empty washings or painting materials into sanitary fittings or drainage systems and shall provide a suitable receptacle outside the building to receive same.

#### Brand Names

- B All brand names of painting materials shall be approved by the Architect. Oil paint shall be best quality alkyd enamel or equivalent grade. Prepare surfaces and apply paint in strict accordance with the specifications of the manufacturer of the brand approved by the Architect.

#### Colour Schemes

- C Allow for varying colours in the individual rooms in accordance with the Architect's colour scheme and also for executing fairly large sample panels of the finishing colours, as and when directed by the Architect.

MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

PAINTING AND DECORATING (Cont'd)

BS and CP References

A	BS 544	Linseed oil putty
	BS 1055	Water paints
	BS 1215	Oil stains
	BS 1282	Classification of wood preservatives
	BS 1336	Knotting
	BS 2521	)
	BS 2523-4	) Priming paints
	BS 3698	)
	BS 2525-2527	Undercoating and finishing paints exterior
	BS 4800	Paint colours for building purposes
	BS 5082	)
	BS 5358	) Priming paints
	BS 6150	Painting of buildings
	CP 2008	Protection of iron and steel structures from corrosion.

Protection

- B Protection of finished work is clearly imperative at all times and the Architect reserves the right to condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item, is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that Contractor has included elsewhere in the Bills for these costs.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### EXTERNAL WORKS

#### General

- A The Contractor is referred to the Civil and Structural Specification which is embodied within these Preambles for items referring to External Work.

#### Drainage Regulations

- B The Contractor shall conform with the regulations and bye-laws of the Public Health Authority and/or other competent authority. The whole of the drainage works shall be executed to conform to BNS Code of Practice CP 16 Part 1.

#### Materials

- C The sand, aggregates, cement and steel shall be as specified under 'Concrete Work'.

Hollow blocks shall be as specified under 'Blockwork'.

Cement mortar shall be as specified under 'Blockwork' for hollow block-wallings.

Cement/sand render shall be as specified under 'Wall Finishes'.

PVC pipe and fittings shall be obtained from an approved manufacturer and shall conform to BS 4660. All fittings shall be of the same joint design as the pipe and must conform to BS 2494 Part 2. Prices for fittings on all types of drain pipe shall include for cutting and extra joints.

Concrete pipes and fittings shall conform to BS 556 with ogee joints jointed with cement mortar 1:1.

#### Workmanship

- D The drains shall be laid to suit the general progress of the building work and at such time and in such a manner as to be adequately protected against damage and deterioration.

All drains and pipes shall be kept clear of obstruction during the process of laying and maintained until completely clear of obstructions and handed over in a clean condition.

The holes previously left below joints for jointing purposes shall be carefully filled in.

Pipes passing through manholes shall be securely made good with cement mortar.

## MATERIALS AND WORKMANSHIP PREAMBLES (Cont'd)

### EXTERNAL WORKS (Cont'd)

#### Testing

- A The drains, soil and vent pipes shall be tested in the presence of and in a manner approved by the Architect. Prices for testing are to include for providing all necessary equipment, water and attendance.

Pipe lines shall be submitted to a hydraulic test before the trenches are completely backfilled. Test pressures shall be 12 times the working head. If any leaks are discovered, the joints shall be resealed and the pressure pipes shall be removed and replaced with sound pipes. The Contractor shall provide all equipment and materials necessary for the tests and attendance upon the Engineer while the tests are being carried out.

During the tests, the backfilling of the trenches shall be complete except that the joints of the pipe and fitting shall remain exposed for visual inspection. Upon satisfactory completion of the test, the remainder of the backfill shall be undertaken in the same way as described in 'Backfilling'.

#### Excavations

- B Excavations are to be carried out to the lines and levels shown on the Engineer's drawings or to such other dimensions as the Engineer may specify.

Excavations shall be kept dry regardless of the source of water and the Contractor shall allow for all measures necessary to achieve this.

The Contractor shall allow for the provision of all temporary works for the support of excavations where necessary, to avoid slips, falls and excess excavation.

The extent of all excavations in open cut shall be the minimum necessary or practicable for the construction of the works.

Trenches shall have at the bottom, at least 6" clearance between the barrel of the pipe to be laid and the face of the excavation or timber sheeting. Roomy joint holes shall be provided so that pipes may rest for their whole length on a properly prepared bed.

Excavations with battered or stepped sides may only be adopted with the prior approval of the Engineer.

The excavation of trenches more than two days in advance of pipe laying and permission to open up new lengths of excavation will be conditional on satisfactory pipe laying and initial backfilling. Trenches shall not be left open longer than is reasonably necessary. The Contractor must inform the Quantity Surveyor 24 hours prior to commencing backfilling any excavations associated with drainage.

### Laying Concrete pipes

- A A bed of concrete (Grade B:21N/mm<sup>5</sup> at 28 days) for the concrete pipes shall be laid in a minimum thickness of 2". Purpose-made precast concrete blocks shall then be set on the concrete in cement mortar and carefully levelled. The pipes shall be laid on the blocks, care being taken to ensure that the jointing rings are correctly located and are not damaged during laying. After laying, the pipes shall be true to line and level and there shall be a gap not less than 3" and not more than 2" wide, between the end of the spigot and the inner face of the socket. The use of steel packings will be permitted on top the concrete blocks to raise the pipes.

### Backfilling

- B After laying the pipes and placing the concrete cradle under the pipe, 'selected fill' shall be carefully placed around the pipe in 4" layers and well compacted to at least 90% of the materials maximum density.

'Selected fill' shall be placed and lightly tamped over the crown of the pipe for a depth of not less than 12" unless otherwise specified on the drawings.

'Selected fill' shall be uniform readily compactible material, free from tree roots, vegetable matter, building rubbish, clay and stones greater than 1" diameter.

Additional filling required to complete backfilling shall be carried out with suitable excavated material placed in 6" layers and thoroughly compacted.

### Protection

- C Protection of finished work is clearly imperative at all times and the Architect reserves the right the condemn work previously accepted if subsequently damaged and to withhold further payment until the work has been rectified. The amount included for the item, is deemed to include for the protection of all work and where no price is included against this item, it will be assumed that Contractor has included elsewhere in the Bills for these costs.

## **Drawings**

**The actual Drawings, including site plans, are annexed in a separate drawing folder.**

**The list of drawings is set out below for reference.**

**Tenderers are referred to the drawings used in the preparation of these bid documents.**

**Any queries should be communicated to the Engineer. In every case, details shown on large scale drawings take precedence over smaller scale drawings.**

## Architectural Drawing List

LOCATION	
Drawing No.	Drawing Title
S1	Site Plan
<b><u>Block A - Kitchen/Dining</u></b>	
AA1	Ground Floor Plan
AA2	Sections A-A & B-B, Details
AA3	Roof Framing Plan
AA4	Roof Plan
AA5	Elevations
AA6	Stair Details
AA7	Door & Window Schedule
AA8	Finishes Schedule
AA9	Internal Elevations
AC1	Reflected Ceiling Plan
AT1	Tile Layout Plan
AF1	Furniture Plan
<b><u>Block B - Administration</u></b>	
BA0	Cistern Layout
BA1	Ground Floor Plan
BA2	First Floor Plan
BA3	Sections A-A & B-B
BA4	Roof Framing Plan
BA5	Roof Plan
BA6	Elevations
BA7	Details
BA8	Stair Details
BA9	Ramp Details
BA10	Ramp Details
BA11	Door & Window Schedule
BA12	Finishes Schedule
BA13	Washroom Internal Elevations
BC1	Ground Floor Reflected Ceiling Plan
BC2	First Floor Reflected Ceiling Plan
BT1	Ground Floor Tile Layout
BT2	First Floor Tile Layout
BF1	Ground Floor Furniture Plan
BF2	First Floor Furniture Plan

<b>LOCATION</b>	
<b>Drawing No.</b>	<b>Drawing Title</b>
<b><u>Block C - Home Economics</u></b>	
CA1	Ground Floor Plan
CA2	Sections A-A & B-B, Details
CA3	Roof Framing Plan
CA4	Roof Plan
CA5	Elevations
CA6	Ramp and Stair Details
CA7	Door & Window Schedule
CA8	Finishes Schedule
CA9	Washroom Internal Elevations
CC1	Reflected Ceiling Plan
CT1	Ground Floor Tile Layout
CF1	Ground Floor Furniture Plan
<b><u>Security Booth</u></b>	
S1	Site Plan
S2	Site Plan
CA1	Ground Floor Plan
CA2	Finishes Schedule
CC1/CT1	Ceiling & Tile Plan
CF1	Furniture Plan
<b><u>Block E - Security Booth</u></b>	
EA1	Ground Floor Plan
EA2	Finishes Schedule
EC1/ET1	Ceiling Plan/Tile Layout
FA1	Furniture Plan
<b><u>Block D - Science Block</u></b>	
D1	Ground Floor Plan - Demolitions
DA1	Proposed Ground Floor Plan/Door & Window Schedule
DA2	Section A-A
DA3	Elevations
DA4	Finishes Schedule
DA5	Finishes
DA6	Finishes
DT1	Tile Layout
DF1	Furniture Plan
<b><u>Schedule of Works to Existing</u></b>	
1A-1	Administrative Block
1A-2	Administrative Block



## MEP Engineer’s Drawing List

Drawing No.	Drawing Title
<b>GENERAL</b>	
1207-EL-GEN-00-1	Electrical Legend - Sheet 1
1207-EL-GEN-00-2	Electrical Legend - Sheet 2
1207-EL-GEN-01	Electrical Installation Notes
1207-ME-FA-50	Fire Suppression System Detail
1207-ME-GP-50	Mechanical Details
1207-ME-WW-50	Septic Tank and Leach Field Detail
<b>ELECTRICAL &amp; SERVICES</b>	
1207-3-EL-GE-85	Site Utility Ducts LV & Elv. Ducts
1207-3-EL-GND-50	Grounding Riser
1207-3-EL-GND-51	Grounding Details
1207-3-EL-GND-52	Grounding Details
1207-3-EL-LG-01	Lighting Layout - Block A
1207-3-EL-LG-02	Lighting Layout - Ground Floor Block B
1207-3-EL-LG-03	Lighting Layout - First Floor Block B
1207-3-EL-LG-04	Lighting Layout - Block C
1207-3-EL-LG-05	Lighting Layout - Block D
1207-3-EL-LG-14	Site Perimeter Lighting & Security Booth Lighting
1207-3-EL-LG-15	Site Perimeter Lighting Isometric
1207-3-EL-LV-01	Power & Telecom Layout - Block A
1207-3-EL-LV-02	Power & Telecom Layout - Ground Floor Block B
1207-3-EL-LV-03	Power & Telecom Layout - First Floor Block B
1207-3-EL-LV-04	Power & Telecom Layout - Block C
1207-3-EL-LV-05	Power & Telecom Layout - Block D
1207-3-EL-LV-40	Electrical Single Line Diagram
1207-3-EL-FA-01	Fire Alarm System Riser Diagram
1207-3-EL-FA-02	Fire Alarm Layout - Ground Floor Block A
1207-3-EL-FA-03	Fire Alarm Layout - Ground Floor Block B
1207-3-EL-FA-04	Fire Alarm Layout - First Floor Block B
1207-3-EL-FA-05	Fire Alarm Layout - Ground Floor Block C
1207-3-EL-PA-01	Public Address System Riser Diagram
1207-3-EL-PA-02	Public Address System Site Equipment Layout
1207-3-EL-SE-01	CCTV System Riser Diagram
1207-3-EL-SE-02	CCTV System Camera Layout
1207-3-EL-SH-60	Lighting Fixture & Panel Schedule
1207-3-EL-TE-01	Telecommunication System Riser Diagram

<b>MECHANICAL &amp; PLUMBING</b>	
1207-3-ME-AC-01	AC Hydronic Piping Layout - Ground Floor Block B
1207-3-ME-AC-02	AC Ventilation Layout & Isometric - Block A
1207-3-ME-AC-03	AC Ventilation Layout - Block C
1207-3-ME-AC-04	AC Hydronic Piping Layout - Block 1
1207-3-ME-AC-101	Ventilation Isometric Block C
1207-3-ME-FA-01	Fire Suppressant Piping Layout & Isometric - Block A
1207-3-ME-FA-02	Fire Suppressant Piping Layout - Block C
1207-3-ME-FA-101	Fire suppressant Piping Isometric - Block C
1207-3-ME-GP-01	Gas Piping Layout & Isometric - Block A
1207-3-ME-GP-02	Gas Piping Layout & Isometric - Block D
1207-3-ME-GP-03	Gas Piping Layout - Block C
1207-3-ME-GP-21	Gas Piping Isometric - Block C
1207-3-ME-GP-101	Gas Piping Isometric - Block C
1207-3-ME-PW-01	Potable Water Layout - Ground Floor and Roof - Block A
1207-3-ME-PW-02	Potable Water Layout - Block B
1207-3-ME-PW-03	Potable Water Layout - Ground Floor and Roof - Block C
1207-3-ME-PW-04	Potable Water Layout & Isometric - Block C
1207-3-ME-PW-20	Potable Water Isometric - Block A
1207-3-ME-PW-21	Potable Water Isometric - Block B
1207-3-ME-PW-22	Potable Water Isometric - Block C
1207-3-ME-PW-200	Potable Water Layout - Site
1207--3-ME-WH-01	Rain Water Harvesting Layout & Isometric - Block B
1207-3-ME-WW-01	Waste Water Layout - Block A
1207-3-ME-WW-02	Waste Water Layout - Block B
1207-3-ME-WW-03	Waste Water Layout - Block C
1207-3-ME-WW-04	Waste Water Layout - Block D
1207-3-ME-WW-20	Waste Water Layout - Block A
1207-2-ME-WW-21	Waste Water Isometric - Block B
1207-3-ME-WW-22	Waste Water Isometric - Block C
1207-3-ME-WW-23	Waste Water Isometric - Block D
1207-3-ME-WW-200	Waste Water Site Layout

## Supplementary Information

1. Preliminaries
2. Bills of Quantities

# Preliminaries

Names of Parties

Employer

Ministry of Education, Science &  
Technology  
Government of Antigua & Barbuda  
Queen Elizabeth Highway  
St. Johns  
Antigua and Barbuda

Tel: (268) 562-1305  
Fax: (268) 462-4970  
Email:

Architect

Moulton Mayers Architects  
McKies Hill  
Kingstown  
St. Vincent

Tel: (784) 457-2072  
Fax: (784) 457.2290  
Email: [mayersarch@vincysurf.com](mailto:mayersarch@vincysurf.com)

Structural Engineer

Addison Workman  
Weatherrills Road  
St. John's  
Antigua

Tel: (268) 462-3700  
Fax: (268) 461-1459  
Email: [awork@candw.ag](mailto:awork@candw.ag)

Mechanical & Electrical Engineer

Sylvester Engineering Ltd  
#30A Vierra Drive  
Champs Fleur  
Trinidad and Tobago

Tel: (868) 662-7935  
Fax: (868) 662-9562  
Email: [admin@syleng.com](mailto:admin@syleng.com)

Quantity Surveyor

Design Collaborative  
"Lauriston"  
Collymore Rock  
St. Michael

Tel: (246) 426-1741  
Fax: (246) 429-4595  
Email: [admin@desgin-collaborative.net](mailto:admin@desgin-collaborative.net)

**PRELIMINARIES**

**LOCATION OF SITE**

- A The site is located in Barbuda. Access to the site is by way of the main public access road.

**SITE RESTRICTIONS AND LIMITATIONS**

- B The site is within and adjacent to the existing school which will continue to operate, thus the Contractor must organize and arrange his work in such a manner to accommodate access to and ongoing day to day operation of the school.
- C The Contractor must do his best in order to prevent vibration, dust and noise emanating from the works being a nuisance and causing disruption to the normal operations of the school.
- D The Contractor must put adequate measures in place in order to prevent such an occurrence. The Contractor must ensure that debris emanating from the work does not accumulate on the public road or the internal road or hinder the public from using the public road in any way.

**MATERIALS EXCAVATED FROM THE SITE**

- E The Contractor is strictly prohibited under any circumstances from excavating to obtain excavated material for his own use. Any excavated material obtained from the authorised excavations shall be the property of the Employer and may, if approved be used in the works.

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GENERAL MATTERS CONT'D

Preliminaries Cont'd

A PRELIMINARY INVESTIGATIONS

The tenderer must examine the drawings and Conditions of Contract, visit the site and satisfy himself as to local conditions, means of access, necessity for and extent of temporary drainage, location of existing services, the extent and nature of the site and work, the restrictions and limitations, the conditions under which work will be carried out, conditions affecting the supply of labour and materials, storage space for materials and plant and generally of all conditions which may in any way affect his tender, as no claim on the grounds of lack of knowledge of any such matters will be entertained. The Architect shall be informed of any area of the proposed works which the tenderer can envisage as causing problems during construction.

GENERAL DESCRIPTION

B The tenderer is referred to the drawings and specifications for a full description of the scope of works.

SIZES OF BUILDINGS

C The Contractor is referred to the drawings for the sizes of the proposed buildings and the Scope of the Works. All drawings and forms of contract may be inspected at the office of the Architect.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

BILLS OF QUANTITIES

- A The Tenderer's attention is specifically drawn to the fact that the Bills have been prepared generally in accordance with the SMM6 as issued by the Royal Institution of Chartered Surveyors and the Construction Confederation and adapted for local use. The Tenderer shall allow in his tender for any items required but not measurable in his rates and prices for the work.

Tenderers are required to submit with their tender a copy of the Bills of Quantities priced in US\$ fully extended out to agree with the total Tender amount. It is emphasized that all items, including those contained in these Preliminaries, must be individually priced.

- B Dayworks: The Contractor shall insert rates and prices to the Daywork schedules in the Bill of Quantities as an integral part of his tender.

- C Ordering Materials: The necessary particulars for ordering materials are to be obtained from the full details and information which shall be approved by the Architect. The Contractor must not use the Bills of Quantities for this purpose. No claims will be admitted in respect of materials which have been ordered without such details and information being sought.

- D Conflicting Clauses: In the event of any descriptions within the Bills of Quantities being at variance, in conflict or inconsistent with the Architect's, Structural Engineer's or Services Engineer's drawings or Specification or with the manufacturers printed recommendations then the requirements of the specification or manufacturer's recommendation will prevail.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

TENDERS

Forms of Tender

- A All prices inserted shall be based upon the cost of labour and materials and other services current at the date of tender.

The form of tender shall be completed quoting firm prices on the basis that there shall be no adjustment to the Contract Sum for fluctuations in prices and any differences in the price between the total on the Summary page and the Form of Tender shall be taken into account by an adjustment to the amount of the Preliminaries and the Bill of Quantities.

Validity of Tender

- B The offer shall be open for a period of 120 days from the closing date for the submission of Tenders.

Alterations to Documents

- C No alterations in the text of these documents shall be made by the Contractor tendering unless so instructed in writing. Should any alteration, amendment note or addition be so made, the same will not be recognised but the reading of the printed documents will be adhered to. If the Contractor wishes to make an observation as to the printed text in connection with the rates he has inserted, this shall be in the form of a covering letter.

Pricing

- D Every price or rate inserted into the documents by the Contractor shall be in ink. The Contractor's prices for any items against which he does not insert prices will either be deemed to be included in items against which prices have been inserted or assumed that he will perform this work or service free of charge.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Currency

- A All prices and sums contained in and mentioned in these documents and all prices inserted by the Contractor shall be in US dollars. Materials and goods required specifically for this project shall be deemed to include for the provision of all labour, materials and return of empties, the erection, maintenance, adjustment and removal of scaffolding, temporary stagings, plankways, protection, hoardings, etc., and for all other things necessary for the completion of the works in accordance with the drawings and specification to the reasonable satisfaction of the Architect.

Visiting Site

- B Persons shall at their own expense, visit the site of the works and obtain for themselves on their own responsibility all information that may be necessary for negotiating and entering into a contract and must examine the Contract Documents and inspect and consider the site and its surroundings.

Obtaining Information

- C Any neglect or failure on the part of the Contractor to obtain reliable information upon any matters affecting the execution, construction, completion and maintenance of the works shall not relieve him from any risks or liabilities for the completion of the works, nor will any claim for increase of the Contract Sum or extension of the Contract period be entertained as a result of such neglect or failure.

Lump Sum Additions or Deductions to arrive at Tender

- D If the Contractor, to arrive at the amount of the contract shall have added to or deducted from the total any sum either as a percentage or proportionate sum, it shall be added to or deducted from the amount of variations in the same percentage or proportion, provided always that in determining the percentage or proportion of the sum so added or deducted by the Contractor the total amounts of any provisional sums of money shall previously be deducted from the contract sum.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Queries

- A The Contractor shall refer all queries arising out of any of the documents to the Architect whose decision, shall be final.

Import Duty and other Tax Concessions

- B Imported materials and goods required specifically for this project shall be free of import duties. This privilege is expressly for the benefit of the Employer.
- C The allowable concessions at present in force in respect of the duty on imported materials to be incorporated in the Works shall be ascertained from a responsible official of the Customs Department. Any special rules in force in respect of the importation of plant, scaffolding, tools, equipment and consumable stores not incorporated in the works, shall also be ascertained.
- D The Contractor shall familiarise himself with the workings of the Customs Department and he shall accept responsibility for preparing and processing the necessary documents involved in the importation of materials, etc; to be incorporated in the Works, including those of suppliers.
- E Detailed lists of all materials to be imported for incorporation in the Works, shall be submitted to the Architect in triplicate within fourteen days of taking possession of the site.
- F The Contractor shall obtain from each nominated sub-contractor within fourteen days of the award of the respective sub-contracts, detailed lists in triplicate of all materials to be imported for incorporation in the sub-contractor's work and such lists shall be forwarded to the Architect.
- G The Contractor shall assist all sub-contractors, nominated or otherwise with the preparation of their documents so that a uniform presentation is made to the appropriate authorities.
- H The Contractor shall allow in this bid for the time and costs involved in the above procedures and in making necessary applications.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

- A The Contractor will be responsible for the cost of licenses, bonds, deposits, levies, taxes, stamp duties, bank charges (for letters of credit or sign drafts, etc) wharfage dues, package tax and any other charges in connection with the importation of goods and materials.

Correction of Errors

- B Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between amounts in figures and in words, the amount in words will govern: and
  - (b) where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit rate and the quantity, the unit rate as quoted will govern, unless, in the opinion of the Employer, there is an obviously gross misplacement of the decimal point in the unit rate, in which event the total amount as quoted will govern and the unit rate be corrected.

Contract Particulars

**Conditions of Contract**

- C The works embraced in this contract shall be carried out in accordance with the FIDIC Conditions of Contract for Construction Multilateral Development Bank Harmonised Edition June 2010.

A copy of the contract conditions is included in this document.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Definitions

- A Where the term “Engineer”, “Architect”, “Quantity Surveyor”, occurs in this document it shall read as meaning the Engineer named in the Contract Data.
- B The term 'approved' 'directed' or 'selected' means the approval, direction and selection by the Architect unless otherwise described.
- C Where the term 'allow' occurs in this document the cost of the item is at the risk of the Contractor.
- D The abbreviations 'BS and CP' mean the latest British Standard Specification and British Code of Practice respectively.
- E The term 'local' means Barbados.
- F All sums of money quoted in this document shall be in local currency Barbados dollars.

Abbreviations

- G The following abbreviations are used:

B.Q.	Bill(s) of Quantities
B.S.	British Standard
B.N.S.	British National Standard
C.P.	Code of Practice
SMM	Standard Method of Measurement 6 <sup>th</sup> Edition
m	Metre
m <sup>2</sup>	Square Metres
m <sup>3</sup>	Cubic Metres
mm <sup>2</sup>	Square Millimetre
mm	Linear Millimetre
Pr.	Pair
Kg.	Kilogramme
N	Newtons
Hr.	Hour
N/mm <sup>2</sup>	Newton Per Square Millimetre

One Document

- H Read the Conditions of Contract, and Specifications, the Bills of Quantities and drawings as one document and carry out everything for the proper execution of the Works whether or not specifically described or shown therein, provided the same may reasonably be inferred therefrom.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Discrepancies

- A Verify on drawings or on site all dimensions shown or given before commencing construction. Work to figured dimensions only and in the absence of any dimensions, or cases of discrepancies between dimensions, bring the matter to the immediate attention of the Architect for a decision. For the purpose of construction, the drawings shall take precedence over the Bill of Quantities but in all cases of discrepancies between the documents, bring the matter to the attention of the Architect whose decision shall be final and binding.

Copies

- B Two copies of the Bill of Quantities and drawings shall be furnished free of charge to the Contractor for his own use until the completion of the contract. They shall be accessible at all reasonable times, to the Architect, to whom they shall be returned at the completion of the Contract. Additional copies will be provided to the Contractor on request and charged at nett cost.

Ordering of Materials

- C Prepare own materials ordering list based on the construction drawings and schedules issued and on site measurements where appropriate. Contract drawings and schedules will be issued on possession of site. At the first site meeting, the Contractor should indicate what information is outstanding and suggest order or priority of receipt of such information to avoid delay by late ordering.

Record Drawings

- D Keep accurate records of the Works in a form acceptable to the Architect.

As-Built Drawings

- E The Contractor will be provided with three sets of Contract Drawings. One set is to be available on the Project Site at all times. The Contractor shall, during the course of the Works, keep a full, neat and accurate record of all changes to the Works from the Contract Drawings and Specifications and shall promptly note these fully on one set of A1 size prints of the Contract Drawings which shall be kept at his site office and be available for inspection by the Engineer upon request. These records shall constitute the As-Built Drawings.

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

A The As-Built Drawings shall also include all utility location and relocation information relevant to the site of the Works. The Contractor shall allow, in the Tender Item for As-Built Drawings, for the cost of modifying a set of Contract Drawings, to be supplied by the Engineer, to fully incorporate all of the As-Built changes he has recorded during construction for the approval of the Engineer. He shall also allow for the provision of four full sets of A1 size prints of the approved As-Built Drawings, to be distributed as follows:-

- Employer - 2 sets
- Engineer - 1 set
- Contractor - 1 set

These drawings shall be completed and supplied to the Engineer together with an electronic copy within thirty days of the taking-over certificate.

Any failure of the Contractor to submit the "As-Built" drawings within the stipulated period will entitle the Engineer to have the base drawings modified by others at the expense of the Contractor.

Fire Precautions

B The Contractor is to take all reasonable precautions to avoid the outbreak of fire particularly in work involving the use of naked flames. He is to impress on the workmen the dangers involved in the careless disposal of matches, cigarette ends, etc., and in the accumulation of rubbish on site.

Fire extinguishers are to be kept on site and operatives instructed as to their whereabouts and use.

Smoking is NOT permitted in any part of the premises and it is the Contractor's responsibility to ensure that this condition is met and enforced throughout the contract period.

Plant, tool and vehicles

C Provide all implements, tools, hoists, plant, vehicles, etc., necessary for the proper execution of the works (for scaffolding, see Temporary Works section).

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Safety, health and welfare of workpeople

- A The Contractor shall, at his own expense, comply in all respects with the requirements of local regulations relating to the safety, health and welfare of operatives and shall provide such mess huts, changing and toilet facilities as are required under local working agreements including providing and maintaining an adequate First Aid kit upon the site or any places where work is being prepared for incorporation into the Works.

Tenderers are referred to clause 4.8 of the Conditions of Contract – Safety Precautions and to clause 6.7 Health and Safety for their full contractual responsibility.

Benefits

- B Allow for all costs in respect of workpeople including but not limited to costs arising from the following:
- (a) Social Services Scheme
  - (b) National Insurance including training fund, unemployment, employment injury, severance fund, health service levy and transport levy
  - (c) Vacation and Public Holidays leave
  - (d) Sick leave
  - (e) Cost of Living Allowance
  - (f) Subsistence Allowance
  - (g) Bonus payments
  - (h) Travelling time and expenses
  - (i) Workman's compensation

and to all other emoluments and expenses payable to or in connection with the employment of persons for the works.

Transport for Workpeople

- C Allow for obtaining an adequate labour force for the Works and include for transporting workers to and from the site, as necessary.

Imported Labour

- D The Contractor must comply with all immigration and other laws in force in respect of the importation of supervisory staff, skilled and unskilled labour and allow for security bonds and other payments in this connection.

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Overtime

- A The contract sum will be deemed to include any overtime working which the Contractor may consider necessary to complete the Works by the date stated. If work is to be executed outwith normal working hours, 24 hours notification must be given and the consent of the Architect must be obtained before commencement.

Safeguarding the Works, materials and plant against damage and theft

- B Allow for all necessary watching and lighting and protection of the Works, materials, plant, etc., on the site from theft or damage of any kind.

Maintenance of public and private roads

- C Make good any damage to roads and footways whether public or private caused by or attributable in any way to the cartage of plant or materials for or by either the Contractor or any sub-contractor under the contract and indemnify the Contracting Authority against loss or damage or claims by the Government or others for damage to roads, paths, etc., by reason of unusual traffic or other causes.

The Contractor is also to take reasonable steps to prevent the excessive deposit on adjacent public or private roads, carparks and footways of mud, clay, hazardous waste etc., from his vehicles or those of any sub-contractor under the contract and is to clear away any dangerous deposits attributable to such vehicles.

Allow for providing all necessary temporary crossovers and hard-standings and clear away on completion and make good all damaged areas.

Police Regulations

- D The Contractor is to ascertain and comply with all police regulations in regard to access to and from the site and to any works that may be executed in public thoroughfares adjacent to the site.

Additional obligations and restrictions imposed by the Employer

- E The Contractor is to carry out the work with the minimum of noise and inconvenience to the occupants of the adjoining properties by the use of plant and equipment incorporating up-to-date methods of sound reduction in accordance with BS 5228.  
Positions of all fixed plant installation on site shall be agreed with the Architect.

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Access to the site shall be during daylight hours only.

The Contractor must inform the Architect of all working operations of a dangerous nature or which he proposes carrying on outside normal working hours.

In the event that exceptionally noisy operations have to be undertaken, the Contractor shall notify the Architect 24 hours in advance of each operation taking place.

Quality Assurance Plan

- A The Contractor shall issue within 28 days after receiving notice for Commencement of Works, a detailed Quality Assurance Plan in a format to be agreed with the Architect.

Tenderers are referred to clause 4.9 of the Conditions of Contract for their full contractual responsibility.

- B Environmental Control Plan

The Contractor shall issue within 28 days after receiving notice for Commencement of Works a detailed Environmental Control Plan in a format to be agreed with the Architect.

Tenderers are referred to clause 4.18 of the Conditions of Contract for their full contractual responsibility.

Site Record Book

- C The Contractor is to keep on site a site record book in which the Architect or Engineer can enter and confirm verbal instructions given on site. Any verbal instructions given to the Contractor at site meetings shall be deemed to have been given in writing when either entered in the site record book or included in the minutes of the site meetings.

Progress Meetings

- D Regular progress meetings will be held throughout the duration of the contract and a principal representative of the Contractor will be required to attend in addition to his senior staff and if specifically requested by the Architect, representatives of any sub-contractors and principal material suppliers.

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Programme

- A The Contractor shall within twenty eight days after receiving the notice for the Commencement of Works, produce a draft outline programme for the information of the Architect. This draft programme shall indicate the dates for commencement and completion of all works including sub-contractors' work and the delivery dates required for materials from nominated suppliers. The Contractor, shall, not more than four weeks after the date for possession and after agreement of working and delivery dates with sub-contractors and nominated suppliers, produce a draft detailed programme indicating the critical path for the information of the Architect and after making any necessary amendments and after agreement of the programme with the sub-contractors, prepare final copies for all consultants and for his own use.

Tenderers are referred to clause 8.3 of the Conditions of Contract for their full contractual responsibility.

The Contractor shall allow for preparing any revised programmes which may become necessary and for notifying all sub-contractors and suppliers and consultants of any changes in programme. The production of revised programmes and their issue to the Architect shall not relieve the Contractor of his responsibility under Clause 20.1 of the Conditions of Contract relating to the giving of formal written notice of delays in, or disturbance of, the regular progress of the Works.

Progress chart and reports

- B Keep a permanent written record on the site of the progress of the Works. This record shall be open to the inspection of the Architect at all reasonable times.

The record shall show the date of commencement and completion of all trades and parts of the work coming under the Contract. It shall also include particulars regarding daily weather conditions, excavation work, erection and removal of formwork, pouring of concrete, removal of formwork, etc., as well as the number of employees of the various trades engaged on the Works.

Submit a written progress report to the Architect at the end of each month showing, but not limited to the percentage of work completed in each trade shown on the programme and progress chart; quality control matters covered by the Quality Assurance Plan; Environmental Control Plan updates; progress photographs, etc.

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Keep up-to-date a copy of the programme marked with coloured crayon to indicate weekly progress on the site compared to the programmed progress. This copy shall be made accessible to the consultants on their request.

Tenderers are referred to clause 4.21 – Progress Reports for their full contractual responsibility.

Utilities

- A The Contractor shall be responsible for arranging and co-ordinating the work of utility companies to suit his work programme and to avoid all possible delays.

Performance Bond

- B The Contractor is to insert in the Summary the cost of providing a Performance Bond with an approved insurance company or bank based or fully represented in Antigua and Barbuda an amount equal to 10% of the Contract Sum, if required by the Employer.

Failure to comply with this requirement will mean that the cost of the Performance Bond, if required, will be provided by the Contractor free of charge.

The successful contractor shall be required to enter into the Bond not later than the date for possession of the site.

A specimen Performance Bond is included as an appendix to this document for tenderers' information.

The Bond shall be maintained by the Contractor until such time as he shall receive the Performance Certificate.

Where applicable, the Bond shall be executed in accordance with the specimen format and shall be deposited with the Architect until such time as the Performance Certificate has been issued.

Mobilisation Payment

- C Should the successful tenderer so request, a mobilisation payment up to an amount of 10% of the contract sum will be considered by the Employer to meet expenditure resulting from the commencement of the Contract. If the contractor requests a mobilisation payment he will be required to provide a mobilisation payment guarantee bond issued by an approved insurance company or bank based or fully represented in Antigua and Barbuda.

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

No advance shall be granted until:

- a) the signing of the Contract;
- b) provision to the Employer by the Contractor of the Performance Bond and insurances required under the contract;
- c) provision to the Employer by the Contractor of a separate directly liable guarantee for the full amount of the advance which shall remain effective until the advance has been completely repaid by the Contractor out of interim payments under the Contract.

The Contractor shall use the advance exclusively for operations connected with the execution of the Works. Should the Contractor misuse any portion of the advance, it shall become due and repayable immediately and no further advance payments will be made to him.

If the Contract is terminated for any reason whatsoever, the guarantees securing the advances may be invoked forthwith in order to repay the balance of the advance still owed by the Contractor, and the guarantor shall not delay payment or raise objection for any rason whatever.

The advance guarantee shall be released as when advances are repaid. The mobilisation payment if requested, will be recovered in equal installments deducted from interim payment certificate No 2 through to No 7.

Site Signboard

- A The Contractor shall erect a signboard displaying his name, the client's name and project title, the names of all consultants and the names of the major sub-contractors. The location, design and layout of the board will be agreed with the Architect. Allow the Provisional Sum of \$4,000.00 for this signboard.

\$4,000.00

Samples

- B Include the Provisional Sum of \$1,000.00 for sample panels, etc., to be expended as directed by the Architect.
- C Tenderers are referred to clause 7.2 of the Conditions of Contract for their full contractual responsibility.

\$1,000.00

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

Watching and protection

- A The site of the proposed works shall be under the Contractor's sole charge from the date of possession to the date of completion of the contract. The Contractor shall be responsible for keeping unauthorized persons off the site.

Provide all necessary day and night watching to effectively protect the Works and materials stored on site and accept all risks for damage or loss.

The Contractor shall as he sees fit, provide all that is necessary for the protection of work-people, adjoining property and the public and alter, adapt and maintain them as necessary and clear away on completion and reinstate all works disturbed.

Handover of completed work

- B A provisional date for handing over the Works shall be agreed and approximately two weeks prior to this, the Architect subject to his being satisfied that the work is in such a state of readiness, shall compile a 'snag list' of omitted and/or defective items and the formal handover shall not take place until all items on the 'snag list' have been completed or remedied or shall be conditional upon completion of these.
- C The Architect shall arrange for the formal handover normally within one week after satisfactory completion by the Contractor of the 'snag list'.
- D At the formal handover, a responsible representative of the Contractor shall accompany the Architect together with such other representatives that the Architect and Employer deem necessary, on an inspection of the Works and if such an inspection shows the Works to be complete in every respect, the Works shall be taken over. Any minor omissions and/or defects found to exist at this point, shall be remedied by the Contractor within seven days.

Contractor's Liability

- E The Contractor shall undertake all risks and liabilities arising out of incidental to or connected with the construction, completion and maintenance of the Works. The Contractor's liability shall extend to all risks involved in the execution of the Works with regard to temporary supports, struts, braces, shores and other works of supports, steadying, restraints or upholding and shall, at his own expense, make good damage or defects resulting from the inadequacy or failure of his actions or work in these respects.

**To Collection**

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Preliminaries Cont'd

GENERAL MATTERS (Cont'd)

NAMED SUB-CONTRACTORS AND SUPPLIERS

Attendance

- A Provide attendance upon, cut away for and make good after all trades and in all trades performed by own workmen and own sub-contractors and leave perfect on completion.

Provide general attendance on named sub-contractors which shall be deemed to include allocation, for free use by sub-contractors of suitable areas on site for office accommodation and storage of plant and materials, reasonable and free use of scaffolding and hoisting tackle already erected by the Contractor, free use of messrooms, sanitary accommodation and their work and cleaning away rubbish.

Provide special attendance on named sub-contractors, ie. cutting chases and the like, only when specifically instructed so to do following the items in the Bills of Quantities which described the particular named sub-contract work. When a lump sum price is inserted against this item, it shall be adjusted in direct proportion to the amount of the named sub-contract PC sum actually expended.

**To Collection**

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Preliminaries Cont'd

NAMED SUB-CONTRACTORS & SUPPLIERS (Cont'd)

Provisional and Prime Cost Sums

- A The term 'Provisional Sum' shall mean a sum provided for work or for costs which cannot be entirely foreseen, defined, or detailed at the time the tendering documents are prepared. Such sum shall be used in part or in whole as directed by the Architect and shall be deemed to be inclusive of any profit required by the Contractor unless otherwise indicated.

The term 'Prime Cost Sum' or 'PC Sum' shall mean a sum provided for work services to be executed by a sub-contractor named by the Architect, a statutory authority or a public undertaking or for materials or goods to be obtained from a supplier named by the Architect. Such sums may be used in part or in whole as directed by the Architect and shall be deemed to be exclusive of any profit required by the Contractor and provision is made for the addition thereof. When profit is added by the Contractor, the sum so added shall be adjusted in direct proportion to the amount of the PC Sum actually expended.

When a PC Sum is given in the description of any item of work, it shall be taken as a price only for the materials or services referred to (delivered to site unless otherwise stated) and the Contractor shall use this price in the build-up of the rate for the supply and installation of that item of work.

The PC price shall be deemed to include the Contractor's cash discount and the Contractor shall be deemed to have allowed in his unit price build-up for the profit, overheads, attendance, etc., he may require on the PC price given. A net adjustment shall be made to the Contractor's build-up price should the service or item selected by the Architect cost more or less than the PC price given.

Named Sub-Contractors

- B The Contractor shall enter into sub-contracts with each of the named sub-contractors embodying such conditions as would make them liable to him for the obligations he owes to the Employer, including the signing of a Performance Bond, as far as they are applicable to the main contract and are relevant to the sub-contract. The Contractor shall produce the signed sub-contracts for inspection by the Architect before the commencement of any work by the sub-contract will not relieve the Contractor from any of his responsibilities under the Contract.

**To Collection**

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Preliminaries Cont'd

NAMED SUB-CONTRACTORS & SUPPLIERS (Cont'd)

Provide all named sub-contractors and specialists with proper facilities for carrying out their work and proper means of access thereto.

Ascertain from all named sub-contractors and specialists at the proper time what their requirements are and make the necessary arrangements for them including leaving or forming chases and holes, etc., in the structure. Should either delay or extra expense be occasioned in consequence of any fault on the part of the Contractor in this respect, the penalty for such delay and extra expense incurred shall be borne by the Contractor.

It shall be the responsibility of the Contractor and each sub-contractor to ensure, by means of regular examination, that the work and materials installed by others do not create conditions which would prevent him from satisfactorily carrying out his work and inform the Architect in writing, as soon as such a condition exists. Failure to notify the Architect of such conditions before work is put in hand shall be construed as an acceptance of all preceding work and a waiver of all claims for questions as to its suitability for receiving his work.

At the time of every valuation of the works for certificate purposes, the Contractor is to submit to the Architect or Quantity Surveyor a statement from each of the named sub-contractors, showing:

1. The gross amount (including discounts and retention) claimed in the current certificate.
2. The net amount received from the Contractor to date.

Amounts in respect of named sub-contractors will not be included in valuations unless these statements are received.

It shall be the responsibility of the Contractor to co-ordinate the performance of named suppliers, on site operations of all nominated sub-contractors and to programme and reprogramme as required, the various operations including builders' work in connection with named sub-contractors' and suppliers' work. Regular site meetings should be held by the Contractor with all the named sub-contractors to enable proper co-ordination and the minutes of these meetings are to be sent to the Architect.

**To Collection**

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Preliminaries Cont'd

NAMED SUB-CONTRACTORS & SUPPLIERS (Cont'd)

Named Suppliers

- A The term 'Fix' (or similar term to the same effect) where prescribed in these Bills of Quantities for the performance of services in connection with materials to be supplied by a nominated supplier, shall in default of express indication to the contrary be deemed to include for taking delivery at site, off-loading, getting in, storing, distributing including hoisting or lowering, assembling and for returning empties, the whole to be at the Contractor's charge and to be included in the rates inserted against the several items to which the description 'fix' applies. All or any damage or breakage sustained by such materials after acceptance of delivery which in the opinion of the Architect, is attributable to the Contractor's neglect of proper precautions, shall be held to be the Contractor's responsibility and all or any replacement or making good of such broken or damaged materials shall be at his expense.

Where materials are to be supplied by an overseas named supplier, the term 'fix' (or similar term to the same effect) shall also include for clearing from the port of entry to Antigua, paying for customs brokerage fees, port and storage charges, bank charges and transportation to the site of the works.

TEMPORARY WORKS

General

- B All temporary works are to be placed on site in positions to be agreed by the Architect.

The price for all temporary works shall include for the provision of works, the hire and maintenance of equipment for as long as required by the work, the removal as required and the making good of any disturbed work or area. Altering, shifting and adapting from time to time as necessary must also be included.

Access and temporary road

- C Access to the site is to be by way of the public access road to the school.

Provide and maintain any temporary sleeper or other temporary main access to the works from the existing road or adjoining properties as necessary and obtain any way leaves that may be required including those in connection with cranes, where jibs enter the air space over adjoining property.

**To Collection**

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Preliminaries Cont'd

Temporary Works – (Cont'd)

Temporary lighting and power for the Works

- A Provide any temporary lighting and electric power required for the carrying out of the work including the works of any sub-contractor and install all temporary wiring, fittings, electric meter, etc.

Water for the Works

- B The Employer will allow the Contractor to tap into the existing supply but this supply must be metered as the Employer shall be reimbursed for water used.

Provide all temporary services, temporary plumbing, storage, etc., as required.

Temporary buildings for use by the Contractor

- C Provide and maintain proper offices for the Contractor's site staff.

Provide and maintain suitable weathertight sheds and other protection necessary for the storage of materials.

Temporary telephone

- D Provide and install a fax/telephone in the site office including paying the cost of all the Contractor's calls. Allow for providing free use of the telephone for the Architect and all other consultants or their appointed representatives for local calls in connection with the Works, clear away at completion and make good all ground disturbed.

Latrines

- E Provide and maintain sanitary accommodation for the use of the workmen in conformity with the requirements of the local Sanitary Authority and also deodorise and keep the same in thoroughly clean condition. Chemical closet type latrines must be used.

Temporary hoardings, gantries and the like

- F Provide all necessary temporary fences, hoardings, planked footways, guard rails, gantries and the like necessary for the protection of the public, the proper execution of the works and comply with the requirements of the local authority and other official bodies having authority in connection with the works, clear away at completion and make good all ground disturbed.

**To Collection**

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Preliminaries Cont'd

TEMPORARY WORKS (Cont'd)

Provide all necessary fans, hoardings, tarpaulins, flying scaffolds or other protection that may be required for the protection of adjoining property, buildings, the public and persons employed on the Works.

Provide all dust sheets, tarpaulins, temporary roofing, etc., as required and carefully cover up and protect the building and contents during the carrying out of the works.

Provide all temporary rainwater pipes, chutes, ducts, etc, as required.

Access

- A The Contractor is to provide at all times during the execution of the works and the defects liability period, proper means of access with ladders, gangways, etc., and the necessary attendance to move or adapt them, as directed for the inspection or measurement of the works by the Architect or his representative.

General Scaffolding

- B Provide all scaffolding necessary for the proper execution and completion of the Works including altering, adapting and maintaining during the progress of the Works. Scaffolding shall be in accordance with BS 5973.

If the Contractor should strike any of his scaffolding before ascertaining whether it is required by any sub-contractor, nominated sub-contractor or public undertaking, he must re-erect it at his own expense if so required.

Protecting, drying and cleaning the Works

- C Cover up and protect the Works including that executed by sub-contractors during inclement weather or from damage from any occurrence whatsoever. The Contractor shall reinstate at his own expense any work so damaged to the satisfaction of the Architect.

Preliminaries Cont'd

TEMPORARY WORKS (Cont'd)

Removing rubbish and cleaning

- A Clear away all rubbish and materials from time to time as necessary or as directed by the Architect and leave the site and premises finally clear.

Clean out all gutters and down pipes, clean glass and metal work, scrub floors, etc., oil locks throughout, touch up paintwork and leave the buildings perfectly clean and entirely fit for occupation.

**To Collection**

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COLLECTION

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AMOUNT OF PRELIMINARIES  
TO SUMMARY

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## **BILL OF QUANTITIES**

**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**BLOCK A**

**ENTRANCE STEPS**

Notes: (i) The items and quantities included under this heading include all structural work below the top of the structural ground floor slab  
(ii) No allowance for working space has been allowed in computing the quantities of excavation. Any working space which is considered necessary by tenderers must be allowed for in their unit rates for these items.

A	Excavate in trenches for foundations not exceeding 5'0" deep and stockpile on site	12	CY
B	Ditto in rock and ditto	2	CY
C	Prepare, level and ram bottom of excavations in rock to receive concrete	12	SY
D	Planking and strutting to sides of excavations not exceeding 5'0" deep	35	SY
E	Backfilling to foundation walls after built	5	CY
F	Imported fill material well compacted in 8" layers within foundation walls	14	CY
G	Prepare surface of fill to receive concrete	14	SY
H	500 gauge polythene damp proof membrane well lapped	14	SY
<u>Concrete Work</u>			
I	2" thick blinding concrete (1:4:8)	12	SY
<u>Reinforced insitu concrete 3000 psi at 28 days ¾" aggregate</u>			
J	In foundations	3	CY
K	In capping beams	2	CY
L	In slab 5" thick	9	SY
M	In steps	3	CY
<u>Reinforcement to ASTM A615</u>			
N	#4 bars	330	Lbs.
O	#3 bars in stirrups	150	Lbs.

To Collection

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Entrance Steps (Cont'd)

Sawn formwork to:

A	Sides of foundations	10	SY
B	Sides of capping beams	6	SY
C	Risers 7" high	28	LY

Blockwork

In walls

D	8" thick filled solid with concrete	20	SY
E	#4 bars in vertical reinforcement	165	Lbs.
	'Durowall' or similar horizontal mild steel ladder reinforcement laid in:		
F	8" thick walls	52	LY
G	#4 bars in dowels fixed into existing structure and grouted with high strength epoxy anchoring adhesive (drawing S1 detail 02)	60	No.

In situ Finishes

Cement and sand render (1:4) finished smooth

H	½" thick in one coat on concrete/block walls	26	SY
I	Trowel finish to concrete	17	SY

Prepare and paint 1 coat concrete primer and 2 coats emulsion on:

J	Cement/sand render walls	26	SY
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Handrails

K	1½" dia galvanise posts 3'6" long having 5" x 5" x ¾" dia raw bolts to concrete slab, welded one end and welded joint to top rail other end	9	No.
L	1½" dia galvanise top rail	58	LF
M	1½" dia intermediate rails	174	LF
N	5" x 5" x ¾" thick ms plate welded to rails 4 times drilled for and including 3/8" dia rawbolts to concrete columns	4	No.
O	Welded joints of intermediate rails to posts	45	No.

To Collection

\$

Entrance Steps (Cont'd)

Decoration

Grind smooth all welded joints, prepare and paint  
2 coats zinc chromate primer and 2 coats gloss  
oil paint on:

A 1½" dia galvanise pipe rails 89 LY

Protection

B Allow for the protection of all of the work contained  
in this section

Item

To Collection

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Collection

Amount of Page No. BQ/1  
Amount of Page No. BQ/2  
Amount of Page No. BQ/3

Amount of Entrance Steps  
To Block A Tender Summary

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**CONCRETE WORK**

Reinforced insitu concrete 3750 psi at 28 days  
¾" aggregate

A	In columns	4	CY
B	In beams	11	CY
C	In beam filling between rafters at 2'0" centres	3	CY

Reinforcement to BS8666

In columns

D	#4 bars	690	Lbs.
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In beams

E	#6 bars	1150	Lbs.
F	#4 bars	1150	Lbs.

In stirrups and the like

G	#3 bars	875	Lbs.
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Sawn formwork to:

H	Vertical faces of columns	27	SY
I	Ditto curved to 1'0" dia	20	SY
J	Sides an soffits of beams	85	SY
K	Sides of beamfilling 9" high cut and fitted between 2" x 6" rafters at 2'0" centres	17	SY

Protection

L	Allow for the protection of all of the work contained in this section	Item	
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Amount of Concrete Work  
To Block A Summary

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**BLOCKWORK WALLS**

Hollow concrete blockwork 1000 psi laid in 1:3  
cement mortar

In walls

A	6" thick	67	SY
	Concrete filling (2000 psi at 28 days) to single core of blockwork reinforced with 1No. ½" dia ht bar		
B	6" thick walls	89	LY
	"Durowall" or similar horizontal mild steel ladder reinforcement laid in		
C	6" thick walls	98	LY
D	Ditto in surrounds to circular window openings	½	CY
E	Reinforcement in ditto	75	Lbs.
F	Sawn formwork to sides and soffit of ditto	4	SY
G	Ditto 6" wide to curves	5	LY
H	Form concrete sills 10" x 4" once checked, bevelled and grooved on underside, include rebar and formwork	9	LY

Protection

I	Allow for the protection of all of the work contained in this section	Item
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Amount of Blockwork Walls  
To Block A Summary

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## ROOF & ROOF FINISHES

### Timber Roof

Note: All timber in this section to be treated  
pitch pine

A	2" x 8" ridge	55	LF	
B	2" x 6" rafters	1120	LF	
C	1" x 10" fascia	190	LF	
D	T111 plywood sheeting ½" thick	2200	SF	
E	1" x 3" battens	880	LF	
F	PVF2 metal roof sheeting 24 gauge screw fixed to battens at 3'0" centres	2200	SF	
G	Ditto ridge capping	55	LF	
H	Foam filler strip at eave and ridge	220	LF	
I	1" thick Prodex rigid foam insulation	520	SF	
J	Allow a provisional sum for metal connectors	PROV	SUM	500.00

### Roof Drainage

K	6" dia PVC gutter fixed with brackets to timber	110	LF	
L	Stop ends	4	No.	
M	Outlets	4	No.	
N	3" dia PVC down pipe fixed with brackets to concrete	20	LY	
O	Extra over for 45 degree bends	12	No.	

### Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

P	Wood fascia	37	SY	
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### Protection

Q	Allow for the protection of all of the work contained in this section	Item		
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Amount of Roof & Roof Finishes  
To Block A Summary

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## DOORS AND WINDOWS

### Windows

Refer to Drawing BA11

Supply and fix the following, include for 8.28mm thick laminated grey tinted glass (3mm glass/ 2.28mm pvb/3mm glass)

White aluminium awning windows

A	Type 1	4	No.
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White aluminium vertical sliding sash glazed window

B	Type 2	2	No.
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White aluminium fixed louvre vents

C	Type 3, circular	2	No.
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### Doors

Refer to Drawing BA11

Aluminium double door with aluminium frames

D	Type D1	1	No.
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Aluminium double door with glazed panels, aluminium frames

E	Type D2	1	No.
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Ironmongery

Supply, fit and fix the following:

F	Stainless steel hinges	12	No.
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G	Aluminium level lockets, (Note: allow for master and sub-master keying)	2	No.
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Weather saddle screwed to concrete

H	5'0" long	2	No.
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### Sundries

I	Caulk around frames with non-setting sealant	47	LY
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### Protection

J	Allow for the protection of all of the work contained in this section	Item	
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Amount of Doors & Windows  
To Block A Summary

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**FLOOR FINISHES**

A Prepare top of existing concrete slab and lay  
12" x 12" Porcelain floor tiles fixed with adhesive  
and grouted with acid resistant grout 33 SY

B Ditto 12" x 12" clay tiles bedded, jointed and  
painted in cement mortar 110 SY

Protection

C Allow for the protection of all of the work contained  
in this section Item

Amount of Floor Finishes  
To Block A Summary

\$

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**WALL FINISHES**

In-situ Finishes (Internal & External)

Cement/sand render (1:4) ½" thick in one coat finished smooth on:

A	Concrete/block walls	263	SY
	Ditto in circular columns		
B	12" dia	20	SY
C	Projecting bands 1" x 5" curved in surrounds to circular openings	6	LY

Tiling

D	12" x 12" Porcelain tiles fixed with adhesive and grouted with acid resistant grout	7	SY
---	---	---	----

Decoration

Prepare and paint 1 coat concrete primer and 2 coats emulsion paint on:

E	Cement/sand render walls	256	SY
	<u>Prepare existing walls and paint 1 coat concrete primer and 2 coats emulsion paint on:</u>		
F	Existing walls	67	SY

Protection

G	Allow for the protection of all of the work contained in this section	Item	
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Amount of Wall Finishes  
To Block A Summary

\$

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**CEILING FINISHES**

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

A Timber ceilings 393 SY

Protection

B Allow for the protection of all of the work contained in this section Item

Amount of Ceiling Finishes  
To Block A Summary

\$

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## FITTINGS AND FIXTURES

### Kitchen Cabinets (Refer to drawing AA9)

Fabricate and install the following:

A	Base units L-shaped on plan 13'0" overall x 2'0" wide x 3'0" high, include for all framework, plywood base, vertical divisions and shelving, doors, drawers, solid surface work top with 2" fascia and 6" backsplash and for all ironmongery and decoration	4	No.
B	High level units 5'0" x 1'0" wide x 3'0" high, include for all framework, plywood verticals, top, bottom and adjustable shelving, glazed doors, and for ditto	2	No.
C	Ditto L-shaped on plan 6'6" overall x 1'0" wide x 3'0" high, include for ditto	2	No.
D	Solid surface segmental shelf at serving counter bullnosed leading edge and 6" deep fascia 5'0" long x maximum 1'6" wide, include for support framework	2	No.

### Balustrades

The following in typical corridor balustrades

E	1½" dia galvanise post 3'6" long having 5" x 5" x ⅜" thick ms plate 4 times drilled for and including ⅜" dia rawl bolts to concrete slab, welded one end and welded joint to top rail other end	6	No.
F	1½" dia top rail	78	LF
G	1½" dia intermediate rails	224	LF
H	Welded joints of intermediate rails to posts	36	No.
I	5" x 5" x ⅜" thick ms plate welded to rails 4 times drilled for and including ⅜" dia rawl bolts to concrete	64	No.

### Decoration

Grind smooth all welded joints, prepare and paint 2 coats zinc chromate primer and 2 coats gloss oil paint on:

J	1½" dia galvanise pipe rails	108	LY
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### Protection

K	Allow for the protection of all of the work contained in this section	Item	
---	---	------	--

Amount of Fittings & Fixtures  
To Block A Summary

\$

**BUILDERS WORK IN CONNECTION WITH SERVICES**

All Provisional

Electrical Installation

Cut and pin the following to blockwork or concrete and afterwards make good

A	Distribution panel	1	No.
B	Power outlets	8	No.
C	Equipment points	4	No.
D	Fire alarm panel	1	No.
E	Smoke/heat detection points	2	No.
F	Pull or break glass boxes	1	No.
G	Alarm sounder	1	No.
H	Lighting points	19	No.
I	Switch points	3	No.

Plumbing and Gas Installations

J	Allow a provisional sum for BWIC	PROV	SUM	1,000.00
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Protection

K	Allow for the protection of all of the work contained in this section	Item
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Amount of BWIC  
To Block A Summary

\$

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**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**BLOCK A**

**SUMMARY**

Entrance Steps	from Page No. BQ/3
Concrete Work	from Page No. BQ/4
Blockwork Walls	from Page No. BQ/5
Roof & Roof Finishes	from Page No. BQ/6
Doors & Windows	from Page No. BQ/7
Floor Finishes	from Page No. BQ/8
Wall Finishes	from Page No. BQ/9
Ceiling Finishes	from Page No. BQ/10
Fittings & Fixtures	from Page No. BQ/11
BWIC Services	from Page No. BQ/12

Amount of Block A  
To Tender Summary

\$

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\_\_\_\_\_

**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**BLOCK B**

**SUBSTRUCTURE**

- Notes: (i) The items and quantities included under this heading include all structural work below the top of the structural ground floor slab  
(ii) No allowance for working space has been allowed in computing the quantities of excavation. Any working space which is considered necessary by tenderers must be allowed for in their unit rates for these items.

Excavations

A	Excavate over area of building to remove top soil and stockpile on site	124	CY
B	Ditto below ditto in isolated pits not exceeding 5'0" deep and ditto	13	CY
C	Ditto below ditto in basement not exceeding 5'0" deep and ditto	500	CY
D	Ditto in trenches for foundations not exceeding 5'0" deep and ditto	92	CY
E	Extra over ditto for excavation in rock	275	CY
F	Prepare, level and ram bottom of excavations in rock to receive concrete	404	SY
G	Hand dress sides of rock excavation 6" wide to slope	88	LY
H	Planking and strutting to sides of excavations not exceeding 5'0" deep	330	SY
I	Backfilling to foundation walls after built	297	CY
J	Imported fill material well compacted in 8" layers within foundation walls	62	CY
K	Hand dress ditto to slopes	23	SY
L	Prepare surface of fill to receive concrete	76	SY
M	500 gauge polythene damp proof membrane well lapped	76	SY
<u>Concrete Work</u>			
N	2" thick blinding concrete (1:4:8)	404	SY

To Collection

\$

Substructure (Cont'd)

Reinforced insitu concrete 3750 psi at 28 days  
3/4" aggregate

A	In foundations	34	CY
B	Cistern base slab 8" thick	273	SY
C	Thickening below ditto	11	CY
D	In columns	6	CY
E	In walls 8" thick	157	SY
F	In beams	29	CY
G	In slabs 5" thick	84	SY
H	In ditto to ramps laid to slope	39	SY
I	In suspended slabs 5" thick	244	SY
J	In steps	2	CY

Reinforcement to BS8666

In foundations

K	#5 bars	2650	Lbs.
L	#4 bars	2750	Lbs.
M	#3 bars	250	Lbs.

In cistern base slab

N	A393 mesh	546	SY
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In columns

O	#6 bars	1750	Lbs.
P	#5 bars	250	Lbs.
Q	#4 bars	690	Lbs.

In beams

R	#6 bars	5870	Lbs.
S	#5 bars	550	Lbs.
T	#4 bars	860	Lbs.

To Collection

\$ \_\_\_\_\_

Substructure (Cont'd)

In walls

A #4 bars 7745 Lbs.

In slabs

B #4 bars 2850 Lbs.

C A193 mesh 123 SY

In stirrups and the like

D #3 bars 1700 Lbs.

Sawn formwork to:

E Sides of foundations 26 SY

F Vertical faces of columns 58 SY

G Ditto curved to 1'0" dia 3 SY

H Ditto curved to 1'6" dia 11 SY

I Vertical faces of walls 314 SY

J Sides and soffit of beams 168 SY

K Soffit of suspended slabs 208 SY

L Edges of slabs 12" high 27 LY

M Risers 7" high 27 LY

Blockwork

Hollow concrete blocks 1000 psi laid in 1:3  
cement/sand mortar

N In walls 8" thick filled solid with concrete 84 SY

O #4 bars in vertical reinforcement 650 Lbs.

'Durowall' or similar horizontal mild steel ladder  
reinforcement laid in

P 8" thick walls 151 LY

Insitu Finishes

Cement and sand render (1:4) with waterproof  
additive, Xypex or similar, finished smooth

Q ½" thick one coat on concrete walls 194 SY

To Collection

\$

Substructure (Cont'd)

A	Ditto on concrete base	216	SY
B	6" radius cove at junction of walls and base	95	LY
C	2 coats thorseal on cistern base	216	SY
D	Ditto on rendered walls	194	SY

Sundries

E	Allow a provisional sum for cistern access manhole covers	PROV	SUM	1,000.00
F	PVC water bar set in concrete	85	LY	

Protection

G	Allow for the protection of all of the work contained in this section	Item		_____
	To Collection		\$	_____

Collection

Amount of Page No. BQ/1  
Amount of Page No. BQ/2  
Amount of Page No. BQ/3  
Amount of Page No. BQ/4

Amount of Substructure To Block B Summary	\$	_____
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## CONCRETE WORK

### Reinforced insitu concrete 3750 psi at 28 days ¾" aggregate

A	In columns and stiffeners	44	CY
B	In beams	51	CY
C	In upstand beams	2	CY
D	In beam filling between rafters at 2'0" centres	8	CY
	In suspended slabs		
E	6" thick	341	SY
F	In stairs	3	CY
G	6" dia metal columns 9'3" long welded both ends to 12" x 6" x ¾" thick metal plates twice drilled for bolts	17	No.
H	Drill concrete for and including ⅝" expansion bolts 5" long	18	No.
I	Non-shrinking grout 12" x 6" to top and bottom of columns	18	No.

### Reinforcement to BS8666

	In columns and stiffeners		
J	#6 bars	3580	Lbs.
K	#5 bars	650	Lbs.
L	#4 bars	1719	Lbs.
	In beams		
M	#8 bars	670	Lbs.
N	#6 bars	7600	Lbs.
O	#4 bars	2950	Lbs.
	In suspended slabs		
P	#3 bars	9,500	Lbs.
Q	In stairs	495	Lbs.
	In stirrups and the like		
R	#3 bars	4350	Lbs.

To Collection

\$ \_\_\_\_\_

Concrete Work (Cont'd)

Sawn formwork to:

A	Vertical faces of columns	253	SY
B	Ditto curved to 1'0" dia	3	SY
C	Ditto curved to 1'6" dia	27	SY
D	Sides and soffits of beams	445	SY
E	Sides of upstand beams	19	SY
F	Sides of beamfilling 9" high cut and fitted between 2" x 6" rafters at 2'0" centres	40	SY
G	Soffit of suspended slabs	276	SY
H	Soffit of landings	4	SY
I	Sloping soffit of stairs	10	SY
J	Exposed stringer 12" wide	8	LY
K	Saw cut concrete/blockwork for flashings	45	LY

Protection

L	Allow for the protection of all of the work contained in this section	Item	_____
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To Collection

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Collection

Amount of Page No. BQ/5

Amount of Page No. BQ/6

Amount of Concrete Work  
To Block B Summary

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\_\_\_\_\_

## BLOCKWORK WALLS

Hollow concrete blockwork 1000 psi laid in 1:3  
cement mortar

In walls

A	8" thick	30	SY
B	6" thick	514	SY
	Concrete filling (2000 psi at 28 days) to single core of blockwork reinforced with 1No. ½" dia ht bar		
C	8" thick walls	59	LY
D	6" thick walls	708	LY
	"Durowall" or similar horizontal mild steel ladder reinforcement laid in		
E	8" thick walls	34	LY
F	6" thick walls	680	LY
G	Concrete 3000 psi at 28 days in lintel and capping beams	2	CY
H	Ditto in surrounds to circular window openings	½	CY
I	Reinforcement in ditto	250	Lbs.
J	Sawn formwork to sides and soffit of ditto	41	SY
K	Ditto 6" wide to curves	17	LY
L	Form concrete sills 10" x 4" once checked, bevelled and grooved on underside, include rebar and formwork	92	LY
	<u>Protection</u>		
M	Allow for the protection of all of the work contained in this section	Item	

Amount of Blockwork Walls  
To Block B Summary

\$

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## ROOF & ROOF FINISHES

### Timber Roof

Note: All timber in this section to be treated pitch pine

A	2" x 8" ridge	135	LF	
B	2" x 8" valley rafter	44	LF	
C	2" x 6" rafters	1936	LF	
D	1" x 10" fascia	292	LF	
E	T111 plywood sheeting ½" thick	4506	SF	
F	1" x 3" battens	1648	LF	
G	PVF2 metal roof sheeting 24 gauge screw fixed to battens at 3'0" centres	4506	SF	
H	Ditto ridge capping	135	LF	
I	Ditto verge flashing 3 times bent girth 14" overall	34	LF	
J	Ditto valley gutter, girth 18" overall	44	LF	
K	Foam filler strip at eave and ridge	562	LF	
L	1" thick Prodex rigid foam insulation	2842	SF	
M	Allow a provisional sum for metal connectors	PROV	SUM	500.00

### Flat Roof Coverings

N	Cement/sand screed (1:4) average 2" thick laid to falls and crossfalls	42	SY	
O	3" x 3" cement/sand triangular fillet	45	LY	

### Mineral fibre torch on roofing as 'Testudo' or similar

P	In two layers laid on ditto	42	SY	
Q	Upstand flashing girth 16" overall, dressed over fillet, up wall and into groove at top and sealed	45	LY	
R	Dress roofing felt to roof outlets	2	No.	

### Roof Drainage

S	6" dia PVC gutter fixed with brackets to timber	216	LF	
T	Stop ends	10	No.	
U	Outlets	10	No.	

To Collection

\$

Roof & Roof Finishes (Cont'd)

A	3" dia PVC down pipe set in concrete	50	LY
B	Ditto fixed with metal brackets ref. detail #6, drawing BA7	38	LY
C	Extra over for 45 degree bends	36	No.
D	'Harmer' or similar metal roof outlet cast into concrete and connection to 3" PVC pipe	2	No.

Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

E	Wood fascia	57	SY
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Protection

F	Allow for the protection of all of the work contained in this section	Item	
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To Collection

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Collection

Amount of Page No. BQ/8

Amount of Page No. BQ/9

Amount of Roof & Roof Finishes  
To Block B Summary

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## DOORS AND WINDOWS

### Windows

Refer to Drawing BA11

Supply and fix the following, include for 8.28mm thick laminated grey tinted glass (3mm glass/ 2.28mm pvb/3mm glass)

White aluminium awning windows

A	Type 1	14	No.
B	Type 2	13	No.
C	Type 3	3	No.
D	Type 4	8	No.
E	Type 6	2	No.

White aluminium fixed glazed window

F	Type 5, circular	2	No.
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White aluminium fixed louvre vents

G	Type 7	2	No.
H	Type 8, circular	2	No.

### Doors

Refer to Drawing BA11

Aluminium door with fanlight over, aluminium frames

I	Type D1	13	No.
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Solid core timber doors with frames and stops, natural oak finish to doors

J	Type D2, with glazed panel	2	No.
K	Type D3	3	No.

Aluminium fixed louvre door, aluminium frames

L	Type 5	1	No.
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Galvanise metal gate complete with hinges built into blockwork, drop bolt with hasp, staple and heavy duty padlock

M	Type D4	1	No.
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To Collection

\$ \_\_\_\_\_

Doors and Windows (Cont'd)

Ironmongery

Supply, fit and fix the following:

A	Stainless steel hinges	60	No.
B	Aluminium lever lockets, (Note: allow for master and sub-master keying)	19	No.
	Weather saddle screwed to concrete		
C	3'0" long	13	No.

Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

D	Timber frames girth over 9" but not exceeding 12"	28	LY
	<u>Prepare and paint 2 coats zinc chromate primer and 2 coats gloss oil paint on:</u>		
E	Galvanise metal gate (both sides measured)	9	SY

Sundries

F	Caulk around frames with non-setting sealant	445	LY
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Protection

G	Allow for the protection of all of the work contained in this section	Item	
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To Collection

\$

Collection

Amount of Page No. BQ/10

Amount of Page No. BQ/11

Amount of Doors and Windows  
To Block B Summary

\$

**FLOOR FINISHES**

A	12" x 12" Porcelain floor tiles fixed with adhesive and grouted with acid resistant grout	116	SY
B	Epoxy floor paint, include for preparing screed	224	SY
C	Trowelled finish to concrete slab	307	SY
D	12" x 12" clay tiles bedded, jointed and painted in cement mortar	208	SY
E	12" x 12" clay step tile bullnosed and ribbed	26	LY
F	Clay riser tiles 12" x 7" high	26	LY
G	2'0" x 2'0" commercial quality carpet tile fixed with adhesive to concrete	56	SY

Skirtings

H	1" x 6" wpp skirting once splayed, plugged to concrete	493	LF
I	4" x 12" Porcelain skirting tile fixed to wall with adhesive and grouted	138	LF

Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

J	Timber skirting girth over 6" but not exceeding 9"	164	LY
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Protection

K	Allow for protection of all work contained in this section	Item	
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Amount of Floor Finishes  
To Block B Summary

\$ \_\_\_\_\_  
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## WALL FINISHES

### In-situ Finishes (Internal & External)

Cement/sand render (1:4) 1/2" thick in one coat finished smooth on:

A	Concrete/block walls	1845	SY
	Ditto in circular columns		
B	12" dia	3	SY
C	18" dia	27	SY
D	Projecting bands 1" x 5"	102	LY
E	Ditto curved in surrounds to circular openings	29	LY

Cement/sand render (1:4) 1" thick in 2 coats finished smooth on:

F	Concrete circular columns 18" dia	11	SY
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### Tiling

G	12" x 12" Porcelain tiles fixed with adhesive and grouted with acid resistant grout	35	SY
H	2" x 1" hardwood rail pencil rounded on two arrises, plugged to blockwork	63	LF
I	Prepare and paint 3 coats matt varnish on ditto girth 3" to 6"	21	LY

### Decoration

Prepare and paint 1 coat concrete primer and 2 coats emulsion paint on:

J	Cement/sand render walls	1810	SY
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### Protection

K	Allow for the protection of all of the work contained in this section	Item	
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Amount of Wall Finishes  
To Block B Summary

\$

## CEILING FINISHES

### Suspended Ceilings

A	2'0" x 2'0" acoustic ceiling tiles laid in tegular white metal suspension system with metal wire hangers to underside of structure	102	SY
B	Water resistant gyproc boarding, joints taped and finished smooth, fixed to and including 2" x 2" wpp framework at 24" centres both ways, include for 2" x 2" wpp hangers to underside of structure	11	SY

### Timber Mouldings

C	1" x 4" wpp moulded ceiling trim, plugged to concrete	88	LF
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### Decoration

Rub down, fill, prepare and paint 1 coat concrete primer and 2 coats emulsion paint on:

D	Soffit of concrete slabs	236	SY
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Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

E	Timber ceilings	279	SY
---	-----------------	-----	----

Prepare and paint 3 coats emulsion on:

F	Gyproc ceiling boarding	11	SY
---	-------------------------	----	----

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

G	Wood ceiling trim, girth over 3" but not exceeding 6"	29	LY
---	---	----	----

### Protection

H	Allow for the protection of all of the work contained in this section	Item	
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Amount of Ceiling Finishes  
to Block B Summary

\$

**FITTINGS AND FIXTURES**

A	Include a Provisional Sum for 4No. white boards	PROV	SUM	4,000.00
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Toilets

Refer to Drawing BA13

Solid surface vanity tops with 9" deep fascia front and 6" high backsplash returned both ends, include for all support framework and cut out for 1No. wash basins

B	6'0" long	3	No.	
---	-----------	---	-----	--

Mirrors with ¼" ply backing set in 2" x 1" hardwood frame, include for decoration

C	2'6" x 3'0"	3	No.	
---	-------------	---	-----	--

Supply, fit and fix:

D	Toilet roll holders	3	No.	
---	---------------------	---	-----	--

E	Counter top mounted soap dispenser, include for hole in solid surfacing	3	No.	
---	---	---	-----	--

Balustrades

The following in typical corridor balustrades

F	1½" dia galvanise post 3'6" long having 5" x 5" x ⅜" thick ms plate 4 times drilled for and including ⅜" dia rawl bolts to concrete slab, welded one end and welded joint to top rail other end	9	No.	
---	---	---	-----	--

G	1½" dia top rail	253	LF	
---	------------------	-----	----	--

H	1½" dia intermediate rails	766	LF	
---	----------------------------	-----	----	--

I	Welded joints of intermediate rails to posts	126	No.	
---	--	-----	-----	--

L	5" x 5" x ⅜" thick ms plate welded to rails 4 times drilled for and including ⅜" dia rawl bolts to concrete	36	No.	
---	---	----	-----	--

Stair and Ramp Handrail

M	1½" dia galvanise rail	94	LF	
---	------------------------	----	----	--

N	1½" dia end plate welded to rail	4	No.	
---	----------------------------------	---	-----	--

O	MS wall brackets welded to rail comprising 1" dia L-shaped bracket welded to 3" x 3" plate 3 times drilled for and including ⅜" dia rawl bolts to concrete	16	No.	
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To Collection

\$

Fittings and Fixtures (Cont'd)

Decoration

Grind smooth all welded joints, prepare and paint  
2 coats zinc chromate primer and 2 coats gloss  
oil paint on:

A	1½" dia galvanise pipe rails	350	LY
B	6" dia ditto columns	53	LY

Protection

C Allow for the protection of all of the work contained  
in this section

Item

To Collection

\$

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\_\_\_\_\_

Collection

Amount of Page No. BQ/15  
Amount of Page No. BQ/16

Amount of Fittings and Fixtures  
To Block B Summary

\$

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\_\_\_\_\_

**BUILDERS WORK IN CONNECTION WITH SERVICES**

All Provisional

Electrical Installation

Cut and pin the following to blockwork or concrete and afterwards make good

A	Distribution panel	5	No.
B	Power outlets	71	No.
C	Ditto floor mounted	4	No.
D	Telephone/computer points	12	No.
E	Equipment points	7	No.
F	Fire alarm panel	1	No.
G	Smoke/heat detection points	8	No.
H	Pull or break glass boxes	4	No.
I	Alarm sounder	2	No.
J	Lighting points	67	No.
K	Switch points	15	No.
L	Security cameras	15	No.
M	Speakers	10	No.
N	BWIC with earth grounding, refer to drawings GND 50/51/52	Item	

A/C and Plumbing

O	Allow a provisional sum for BWIC	PROV	SUM	4,000.00
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Protection

P	Allow for the protection of all of the work contained in this section	Item	
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Amount of Builders Works in Connection with Services to Block B Summary

\$ \_\_\_\_\_

**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**BLOCK B**

**SUMMARY**

Substructure	from Page No. BQ/4
Concrete Work	from Page No. BQ/6
Blockwork Walls	from Page No. BQ/7
Roof & Roof Finishes	from Page No. BQ/9
Doors & Windows	from Page No. BQ/11
Floor Finishes	from Page No. BQ/12
Wall Finishes	from Page No. BQ/13
Ceiling Finishes	from Page No. BQ/14
Fittings & Fixtures	from Page No. BQ/16
BWIC Services	from Page No. BQ/17

Amount of Block B  
To Tender Summary

\$

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**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**BLOCK C**

**SUBSTRUCTURE**

- Notes: (i) The items and quantities included under this heading include all structural work below the top of the structural ground floor slab  
(ii) No allowance for working space has been allowed in computing the quantities of excavation. Any working space which is considered necessary by tenderers must be allowed for in their unit rates for these items.

Excavations

A	Excavate over area of building to remove top soil and stockpile on site	138	CY
B	Ditto in trenches for foundations not exceeding 5'0" deep and ditto	149	CY
C	Extra over ditto for excavation in rock	17	CY
D	Prepare, level and ram bottom of excavations in rock to receive concrete	147	SY
E	Planking and strutting to sides of excavations not exceeding 5'0" deep	235	SY
F	Backfilling to foundation walls after built	143	CY
G	Remove surplus excavated material from site	74	CY
H	Spread and level surplus excavated material on site not exceeding 12" thick	70	CY
I	Imported fill material well compacted in 8" layers within foundation walls	328	CY
J	Hand dress ditto to slopes	55	SY
K	Prepare surface of fill to receive concrete	328	SY
L	500 gauge polythene damp proof membrane well lapped	328	SY

Concrete Work

M	2" thick blinding concrete (1:4:8)	147	SY
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Reinforced insitu concrete 3750 psi at 28 days  
3/4" aggregate

N	In foundations	49	CY
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To Collection

\$

Substructure (Cont'd)

A	In columns	3	CY
B	In beams	21	CY
C	In slabs 5" thick	349	SY
D	In ditto to ramps laid to slope	17	SY
E	In steps	2	CY

Reinforcement to BS8666

In foundations

F	#5 bars	1150	Lbs.
G	#4 bars	2780	Lbs.

In columns

H	#4 bars	610	Lbs.
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In beams

I	#4 bars	1610	Lbs.
---	---------	------	------

In slabs

J	A252 mesh	366	SY
---	-----------	-----	----

In stirrups and the like

K	#3 bars	2910	Lbs.
---	---------	------	------

Sawn formwork to:

L	Sides of foundations	118	SY
M	Vertical faces of columns	24	SY
N	Ditto curved to 1'6" dia	5	SY
O	Edges of slabs 12" high	93	LY
P	Risers 7" high	24	LY

Blockwork

Hollow concrete blocks 1000 psi laid in 1:3  
cement/sand mortar

Q	In walls 8" thick filled solid with concrete	162	SY
R	#4 bars in vertical reinforcement	765	Lbs.

To Collection

\$



## CONCRETE WORK

### Reinforced insitu concrete 3750 psi at 28 days ¾" aggregate

A	In columns and stiffeners	8	CY
B	In beams	23	CY
C	In beam filling between rafters at 2'0" centres	6	CY
D	6" dia metal columns 9'3" long welded both ends to 12" x 6" x ¾" thick metal plates twice drilled for bolts	13	No.
E	Drill concrete for and including ¾" expansion bolts 5" long	26	No.
F	Non-shrinking grout 12" x 6" to top and bottom of columns	13	No.

### Reinforcement to BS8666

#### In columns and stiffeners

G	#4 bars	750	Lbs.
	In beams		
H	#6 bars	3430	Lbs.
I	#4 bars	1335	Lbs.
	In stirrups and the like		
J	#3 bars	1420	Lbs.

### Sawn formwork to:

K	Vertical faces of columns	81	SY
L	Ditto curved to 1'6" dia	13	SY
M	Sides and soffits of beams	174	SY
N	Sides of beamfilling 9" high cut and fitted between 2" x 6" rafters at 2'0" centres	36	SY

### Sundries

O	<u>Saw cut groove in concrete for flashings</u>	12	LY
---	---	----	----

### Protection

P	Allow for the protection of all of the work contained in this section	Item	
---	---	------	--

Amount of Concrete Work  
To Block C Summary

\$

**BLOCKWORK WALLS**

Hollow concrete blockwork 1000 psi laid in 1:3 cement mortar

In walls

A	6" thick	332	SY
B	4" thick	38	SY
	Concrete filling (2000 psi at 28 days) to single core of blockwork reinforced with 1No. ½" dia ht bar		
C	6" thick walls	432	LY
D	4" thick walls	64	LY
	"Durowall" or similar horizontal mild steel ladder reinforcement laid in		
E	6" thick walls	414	LY
F	4" thick walls	48	LY
G	Concrete 3000 psi at 28 days in lintel and capping beams	1	CY
H	Ditto in surrounds to circular window openings	½	CY
I	Reinforcement in ditto	250	Lbs.
J	Sawn formwork to sides and soffit of ditto	26	SY
K	Ditto 6" wide to curves	3	LY
L	Form concrete sills 10" x 4" once checked, bevelled and grooved on underside, include rebar and formwork	46	LY
	<u>Protection</u>		
M	Allow for the protection of all of the work contained in this section	Item	

Amount of Blockwork Walls  
To Block C Summary

\$

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## ROOF & ROOF FINISHES

### Timber Roof

Note: All timber in this section to be treated pitch pine

A	2" x 8" ridge	128	LF	
B	2" x 8" valley rafter	44	LF	
C	2" x 6" rafters	868	LF	
D	1" x 10" fascia	274	LF	
E	T111 plywood sheeting ½" thick	4308	SF	
F	1" x 3" battens	792	LF	
G	PVF2 metal roof sheeting 24 gauge screw fixed to battens at 3'0" centres	4308	SF	
H	Ditto ridge capping	128	LF	
I	Ditto verge flashing 3 times bent girth 14" overall	34	LF	
J	Ditto valley gutter girth 18" overall	44	LF	
K	Foam filler strip at eave and ridge	414	LF	
L	1" thick Prodex rigid foam insulation	2842	SF	
M	Allow a provisional sum for metal connectors	PROV	SUM	500.00

### Roof Drainage

N	6" dia PVC gutter fixed with brackets to timber	198	LF	
O	Stop ends	10	No.	
P	Outlets	10	No.	
Q	Internal 90° angle	2	No.	
R	3" dia PVC down pipe set in concrete	10	LY	
S	Ditto fixed with metal brackets ref. detail #6, drawing BA7	10	LY	
T	Extra over for 45 degree bends	24	No.	

### Decoration

Prepare, paint 1 coat primer and 2 coats gloss oil paint on:

U	Wood fascia	53	SY	
---	-------------	----	----	--

To Collection

\$

Roof & Roof Finishes (Cont'd)

Protection

A Allow for the protection of all of the work contained  
in this section

Item

To Collection

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\_\_\_\_\_

Collection

Amount of Page No. BQ/6

Amount of Page No. BQ/7

Amount of Roof & Roof Finishes  
To Block C Summary

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## DOORS AND WINDOWS

### Windows

Refer to Drawing CA7

Supply and fix the following, include for 8.28mm thick laminated grey tinted glass (3mm glass/ 2.28mm pvb/3mm glass)

White aluminium awning windows

A	Type 1	2	No.
B	Type 2	2	No.
C	Type 3	11	No.
D	Type 4	2	No.
E	Type 5	3	No.
F	Type 6	5	No.

White aluminium fixed louvre vents

G	Type 7, circular	1	No.
---	------------------	---	-----

### Doors

Refer to Drawing CA7

Aluminium door with fanlight over, aluminium frames

H	Type D1	6	No.
---	---------	---	-----

Solid core timber doors with frames and stops, natural oak finish to doors

I	Type D2	1	No.
J	Type D3	5	No.
K	Type D4	3	No.

Galvanise metal two leaf gate complete with hinges built into blockwork, drop bolt with hasp, staple and heavy duty padlock

L	Type D5	1	No.
---	---------	---	-----

### Ironmongery

Supply, fit and fix the following:

M	Stainless steel hinges	30	No.
---	------------------------	----	-----

To Collection

\$ \_\_\_\_\_

Doors and Windows (Cont'd)

A	Ditto falling hinges	10	No.
B	Aluminium lever lockets, (Note: allow for master and sub-master keying)	10	No.
	Weather saddle screwed to concrete		
C	3'0" long	6	No.
D	Toilet indicator bolt	5	No.

Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

E	Timber frames girth over 9" but not exceeding 12"	39	LY
---	---	----	----

Prepare and paint 2 coats zinc chromate primer and 2 coats gloss oil paint on:

F	Galvanise metal gate (both sides measured)	8	SY
---	--	---	----

Sundries

G	Caulk around frames with non-setting sealant	199	LY
---	--	-----	----

Protection

H	Allow for the protection of all of the work contained in this section	Item	
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To Collection

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Collection

Amount of Page No. BQ/8  
Amount of Page No. BQ/9

Amount of Doors and Windows  
To Block C Summary

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**FLOOR FINISHES**

A	12" x 12" Porcelain floor tiles fixed with adhesive and grouted with acid resistant grout	48	SY
B	Epoxy floor paint, include for preparing screed	166	SY
C	Trowelled finish to concrete slab	9	SY
D	12" x 12" clay tiles bedded, jointed and painted in cement mortar	111	SY
E	12" x 12" clay step tile bullnosed and ribbed	8	LY
F	Clay riser tiles 12" x 7" high	8	LY

Skirtings

G	1" x 6" wpp skirting once splayed, plugged to concrete	137	LF
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Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

H	Timber skirting girth over 6" but not exceeding 9"	46	LY
---	--	----	----

Protection

I	Allow for protection of all work contained in this section	Item	
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Amount of Floor Finishes  
To Block C Summary

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**WALL FINISHES**

In-situ Finishes (Internal & External)

Cement/sand render (1:4) 1/2" thick in one coat finished smooth on:

A	Concrete/block walls	995	SY
	Ditto in circular columns		
B	18" dia	13	SY
C	Projecting bands 1" x 5"	53	LY
D	Ditto curved in surrounds to circular openings	10	LY

Tiling

E	12" x 12" Porcelain tiles fixed with adhesive and grouted with acid resistant grout	126	SY
F	2" x 1" hardwood rail pencil rounded on two arrises, plugged to blockwork	209	LF
G	Prepare and paint 3 coats matt varnish on ditto girth 3" to 6"	70	LY

Decoration

Prepare and paint 1 coat concrete primer and 2 coats emulsion paint on:

H	Cement/sand render walls	869	SY
---	--------------------------	-----	----

Protection

I	Allow for the protection of all of the work contained in this section	Item	
---	---	------	--

Amount of Wall Finishes  
To Block C Summary

\$

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\_\_\_\_\_

**CEILING FINISHES**

Suspended Ceilings

A	Gyproc boarding, joints taped and finished smooth, fixed to and including 2" x 2" wpp framework at 24" centres both ways, include for 2" x 2" wpp hangers to underside of structure	214	SY
---	---	-----	----

Timber Mouldings

B	1" x 4" wpp moulded ceiling trim, plugged to concrete	383	LF
---	---	-----	----

Decoration

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

C	Timber ceilings	242	SY
---	-----------------	-----	----

Prepare and paint 3 coats emulsion on:

D	Gyproc ceiling boarding	214	SY
---	-------------------------	-----	----

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

E	Wood ceiling trim, girth over 3" but not exceeding 6"	128	LY
---	---	-----	----

Protection

F	Allow for the protection of all of the work contained in this section	Item	
---	---	------	--

Amount of Ceiling Finishes  
to Block C Summary

\$

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

**FITTINGS AND FIXTURES**

Home Economics

Base units 2'0" wide x 3'0" high against walls with doors one side and intermediate shelf, solid surface top with 2" deep fascia, include for all hardware and decoration

A	6'0" long with 6" backsplash	3	No.
B	5'0" long with ditto	4	No.
C	11'0" long free standing unit with back panel	4	No.
D	8'0" long, ditto	1	No.
E	Extra over for cutting hole in worktop for sink	6	No.

Home Management

Base units 2'0" wide x 3'0" high against walls with doors one side and intermediate shelf, solid surface top with 2" deep fascia, include for all hardware and decoration

F	4'6" long with 6" backsplash	1	No.
G	3'0" long with ditto	1	No.
H	1'6" long with ditto	1	No.
I	1'0" long	1	No.

High level cupboard 1'0" wide x 3'0" high, include for 2No. Intermediate adjustable shelves, all hardware and decoration

J	21'0" long, 10No. doors	1	No.	
K	Include a Provisional Sum for 2No. white boards	PROV	SUM	2,000.00

Toilets

Refer to Drawing CA9

Solid surface vanity tops with 8" deep fascia front and 6" high backsplash returned both ends, include for all support framework and cut out for 3No. wash basins

L	9'2" long	1	No.
M	Ditto shaped on plan, refer to drawing CA9 with ditto and ditto, cut out for 1No. wash basin	1	No.

To Collection

\$

Fittings and Fixtures (Cont'd)

Mirrors with 1/4" ply backing set in 2" x 1" hardwood frame, include for decoration

A 2'6" x 3'0" 7 No.

Supply, fit and fix:

B Toilet roll holders 7 No.

C Counter top mounted soap dispenser, include for hole in solid surfacing 7 No.

Balustrades

The following in typical corridor balustrades

D Ditto 3'6" long having 5" x 5" x 3/8" thick ms plate 4 times drilled for and including 3/8" dia rawl bolts to concrete slab, welded one end and welded joint to top rail other end 10 No.

E 1 1/2" dia top rail 156 LF

F 1 1/2" dia intermediate rails 468 LF

G Welded joints of intermediate rails to posts 156 No.

H 5" x 5" x 3/8" thick ms plate welded to rails 4 times drilled for and including 3/8" dia rawl bolts to concrete 4 No.

Decoration

Grind smooth all welded joints, prepare and paint 2 coats zinc chromate primer and 2 coats gloss oil paint on:

I 1 1/2" dia galvanise pipe rails 218 LY

J 6" dia ditto posts 40 LY

Protection

K Allow for the protection of all of the work contained in this section Item

To Collection

\$

Collection

Amount of Page No. BQ/13

Amount of Page No. BQ/14

Amount of Fittings and Fixtures  
To Block C Summary

\$

**BUILDERS WORK IN CONNECTION WITH SERVICES**

All Provisional

Electrical Installation

Cut and pin the following to blockwork or concrete and afterwards make good

A	Distribution panel	4	No.
B	Power outlets	24	No.
C	Equipment points	12	No.
D	Fire alarm panel	1	No.
E	Smoke/heat detection points	7	No.
F	Pull or break glass boxes	2	No.
G	Lighting points	37	No.
H	Switch points	5	No.

A/C and Plumbing

I	Allow a provisional sum for BWIC	PROV	SUM	4,000.00
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Protection

J	Allow for the protection of all of the work contained in this section	Item
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Amount of Builders Works in Connection with Services to Block C Summary

\$

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\_\_\_\_\_

**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**BLOCK C**

**SUMMARY**

Substructure	from Page No. BQ/3
Concrete Work	from Page No. BQ/4
Blockwork Walls	from Page No. BQ/5
Roof & Roof Finishes	from Page No. BQ/7
Doors & Windows	from Page No. BQ/9
Floor Finishes	from Page No. BQ/10
Wall Finishes	from Page No. BQ/11
Ceiling Finishes	from Page No. BQ/12
Fittings & Fixtures	from Page No. BQ/14
BWIC Services	from Page No. BQ/15

Amount of Block C  
To Tender Summary

\$

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\_\_\_\_\_

**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**WORK TO EXISTING SCHOOL BUILDINGS**

Generally

A	Clean and paint soffit of timber walkway roofs 2 coats gloss	364	SY
B	Ditto rust inhibitor and 2 coats gloss oil on metal	37	SY
C	Prepare and paint existing metal doors and frames	234	SY
D	Clean out all existing gutters	SUM	
E	Change all existing locks to allow for sub-master and master keying	35	No.

Industrial Building

F	Enclose switchgear in timber closet with fixed wooden louvre doors	SUM	
G	Replace 2 leaf 5'0" wide entrance door and plant existing frame	1	No.
H	Replace light fitting at entrance	1	No.
I	Repair render at entrance step	SUM	

Staff Room

J	Repair cracks over and below 1No. Window	SUM	
K	Replace 3'0" wide timber door	1	No.
L	Repair damaged walkway and step	SUM	

Proposed Science Laboratory - (Block D)

M	Carefully demolish existing 6" thick reinforced concrete block walls and remove with all debris from site (approximately 53SY in all)	Item	
N	Carefully cut door opening 3'0" x 7'0" in ditto, include for removing all debris from site and for inserting concrete lintel and making good all finishes flush with existing	1	No.
O	Make good existing walls and floor where walls removed	22	LY

Take out and remove the following:

P	Existing door and frame and lay aside for reuse	1	No.
Q	Section of existing window 5'3" x 5'0"	1	No.

To Collection

\$

Work to Existing School Buildings (Cont'd)

A	Plywood base cabinets 221 CF in all	Item		
B	Block up existing door opening in 6" wall, include for extending finishes both side flush with existing	1	No.	
C	Part block up existing window opening 2'6" x 5'0" and part cut out 6" blockwork below existing window, for door opening 3'0" x 3'0", include for removal of all debris from site and for ditto	1	No.	
D	Construct new gas bottle store 6'0" x 2'6" x 6'0" high all as shown on drawings, include for all finishes and for galvanise iron gate D2 (refer to drawing DA1) and decoration	Item		
E	Fit and fix existing door previously laid aside for reuse, include for decoration and for new hinges and lockset	1	No.	
F	Supply, fit and fix new D1 (ref. drawing DA1) including frame, decoration and all ironmongery	1	No.	
G	Allow for repairs to vinyl tiles at existing door opening  Base units 2'0" wide x 3'0" high against walls with doors one side and intermediate shelf, solid surface top with 2" deep fascia, include for all hardware and decoration	Item		
H	32'6" long with 6" backsplash	1	No.	
I	26'0" long with ditto	1	No.	
J	11'0" long free standing unit with back panel	5	No.	
K	6'0" long, ditto	1	No.	
L	Extra over for cutting hole in worktop for sink	17	No.	
M	Allow a provisional sum for raised teachers platform	PROV	SUM	1,000.00
N	Allow a provisional sum for 2No. white boards	PROV	SUM	2,000.00
O	Allow a provisional sum for builders work in connection with MEP services	PROV	SUM	1,000.00

Existing Computer Laboratory

P	Carefully cut window opening 6'0" wide x 5'0" high in existing 6" reinforced concrete block wall, include for removing all debris from site, inserting concrete lintels, forming concrete sill and for making good all finishes flush with existing	2	No.	
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To Collection

\$

Work to Existing Buildings (Cont'd)

Supply, fit and fix the following, include for 8.28mm thick laminated grey tinted glass (3mm glass/2.28mm pvb/3mm glass)

White Aluminium awning window

A Type W1 (refer to drawing DA1) 2 No.

Learning Centre/computer Laboratory (Block D)

B Check and repair A/C SUM

C Construct access ramp to east of walkway SUM

Classrooms/Assembly Hall

D Ease and repair sliding folding doors to operate efficiently SUM

E Construct access ramps at both ends of walkway SUM

Toilet Block

F Repair 2No. stainless steel urinal troughs and cisterns SUM

G Add 1No. additional tank to services boys toilet SUM

Replace

H - Mirrors 2 No.

I - WC seats 6 No.

Existing Timber Building

J Allow a Provisional Sum for general repairs and maintenance PROV SUM 4,000.00

To Collection \$                     

Collection

Amount of Page No. BQ/1

Amount of Page No. BQ/2

Amount of Page No. BQ/3

Amount of Work to Existing School Buildings To Tender Summary \$

## **EXTERNAL WORKS**

**ST. MARY'S SECONDARY SCHOOL**

**EXTERNAL WORKS**

**ROADS, CAR PARK AND CONCRETE PAVING**

A	Excavate to reduce levels starting from existing ground level and remove from site	377	CY	
B	Prepare and grade surfaces of excavations to receive fill	829	SY	
C	Marl fill material consolidated in layers not exceeding 6" before compaction	167	CY	
D	12" base course (graded limestone 1" - 3") with penetration to receive asphalt	754	SY	
E	1½" thick hot mix asphalt wearing course	754	SY	
	<u>Prepare and paint 2 coats road marking paint on:</u>			
F	Asphalt surfacing in strip 4" wide	48	LY	
	<u>In-situ concrete, Grade 20, ¾" aggregate in:</u>			
G	Kerb size 6" x 16" overall finished smooth on exposed surfaces girth 20", include for all reinforcement and formwork, excavation and haunching	207	LY	
H	Ditto to curves	39	LY	
I	5" thick beds with exposed aggregate finish	20	SY	
J	A142 mesh fabric in ditto	20	SY	
K	Sawn formwork to edges of bed 5" high	16	LY	
L	6" x 6" precast concrete wheel stops 6'0" long anchored in place	11	No.	
M	Provisional sum for repairs to existing roadway at entrance	PROV	SUM	1,000.00
	Allow provisional sums for the following:			
N	New 2 leaf 5'0" wide x 5'3" high entrance gate	PROV	SUM	1,000.00
O	New garbage area	PROV	SUM	4,000.00
P	Repairs to existing garbage service gate	PROV	SUM	<u>1,200.00</u>
	To Collection			\$

Roads, Car Park & Concrete Paving (Cont'd)

Protection

A Allow for the protection of all of the work contained  
in this section

Item

To Collection

\$

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Collection

Amount of Page No. EW/1

Amount of Page No. EW/2

Amount of Roads, Car Park & Concrete Paving  
To External Work Summary

\$

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**SURFACE WATER DRAINAGE**

Excavate in trench not exceeding 5'0" deep for pipes, part return fill and ram selected excavated material and spread and level surplus on site, include for grading bottom and keeping free from general water, for:

	6" dia pipe		
A	average 3'0" deep	4	LY
	4" dia pipe		
B	average 3'0" deep	74	LY
C	Sand surround to pipes	15	CY
	PVC pipes schedule 80 laid and jointed in trenches		
D	6" dia	4	LY
E	4" dia	74	LY
F	Construct concrete and blockwork catch pit 2'0" x 2'0" x 2'0" deep internally with ductile iron grating	1	No.
	<u>Protection</u>		
G	Allow for the protection of all of the work contained in this section	Item	

Amount of Surface Water Drainage  
To External Works Summary

\$ \_\_\_\_\_  
\_\_\_\_\_

**SOIL AND WASTE DRAINAGE**

Excavate in trenches not exceeding 5'0" deep for large bore pipes, return fill and ram selected excavated material and spread and level surplus on site, include for grading bottom and for keeping free from general water

A	Average 2'6" deep	205	LY
B	Sand surrounds to pipes	31	CY
	PVC pipes laid and jointed in trenches		
C	6" diameter	40	LY
D	4" diameter	130	LY
E	2" diameter	35	LY
	Extra over bends		
F	4" dia	17	No.
G	2" dia	4	No.
	Extra for branches		
H	4" dia	14	No.
I	2" dia	14	No.
	Extra for reducers		
J	6" - 4" dia	3	No.
K	6" - 2" dia	7	No.
L	4" - 2" dia	7	No.
	Construct clean outs all as detailed on engineers drawing		
M	6" dia	3	No.
N	4" dia	4	No.
	<u>Testing</u>		
O	Allow for testing the whole of the drainage installation to the satisfaction of the Architect	Item	
	<u>Protection</u>		
P	Allow for the protection of all of the work contained in this section	Item	

Amount of Soil and Waste Drainage  
To External Works Summary

\$

**BUILDERS WORK IN CONNECTION WITH SERVICES**

Water Supply

Excavate in trenches for large bore pipes not exceeding 5'0" deep part return fill and ram selected excavated material and spread and level surplus on site, include for keeping free from general water

A	average 2'0" deep	182	LY
B	Sand filling in trenches around pipes	20	CY
Construct gate valve/meter chamber of 3" thick reinforced concrete foundations, 4" blockwalls, concrete capping with chequer plate cover, size:			
C	3'0" x 2'0" x 2'0" deep internally	1	No.
D	Construct concrete foundation for fire hydrant	1	No.

Electrical and Telephone Distribution

Excavate in trenches not exceeding 5'0" deep, part return, fill and ram selected excavated material and spread and level surplus on site, include for keeping free from general water

E	3'0" deep for multiple ducts average 3'0" deep	307	LY
F	Sand filling in trenches around ducts	45	CY
G	12" x 12" clay tile laid in trench with electrical caution tape above	307	LY
Construct electrical manholes 4'0" x 4'0" internally all as shown on M&E site plan manhole layout drawing			
H	4'0" deep internally	9	No.
I	Excavate in isolated pits for and including 2'0" x 2'0" x 1'6" deep concrete foundation for light poles	22	No.

A/C Installation

J	Allow a provisional sum for BWIC A/C condensate drains	PROV	SUM	1,300.00
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P.V. Installation

K	Allow a provisional sum for BWIC with P.V. Installation and fencing	PROV	SUM	<u>6,000.00</u>
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To Collection \$

Builder's Work (Cont'd)

Protection

A Allow for the protection of all of the work contained  
in this section

Item

To Collection

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Collection

Amount of Page No. EW/5

Amount of Page No. EW/6

Amount of Builders Work  
To External Works Summary

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**SECURITY BOOTH (BLOCK E)**

Substructure

- Notes: (i) The items and quantities included under this heading include all structural work below the top of the structural ground floor slab  
(ii) No allowance for working space has been allowed in computing the quantities of excavation. Any working space which is considered necessary by tenderers must be allowed for in their unit rates for these items.

Excavations

A	Excavate over area of building to remove top soil and stockpile on site	2	CY
B	Ditto below ditto in isolated pits not exceeding 5'0" deep and ditto	4	CY
C	Ditto exceeding 5'0" but not exceeding 10'0" deep and ditto	10	CY
D	Prepare, level and ram bottom of excavations to receive concrete	4	SY
E	Planking and strutting to sides of pit excavations not exceeding 5'0" deep	25	SY
F	Ditto exceeding 5'0" but not exceeding 10'0" deep	10	SY
G	Backfilling to pits well compacted in maximum 8" layers	22	CY
H	Ditto to foundation walls after built	9	CY
I	Imported fill material well compacted in 8" layers within ditto	2	CY
J	Prepare surface of fill to receive concrete	3	SY
K	500 gauge polythene damp proof membrane well lapped	3	SY

Concrete Work

L	2" thick blinding concrete (1:4:8)	4	SY
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Reinforced insitu concrete 3000 psi at 28 days  
3/4" aggregate

M	In isolated column bases	1½	CY
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To Collection

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Security Booth (Cont'd)

A	In columns	½	CY
B	In beams	1	CY
C	In slabs 6" thick	4	SY

Reinforcement to ASTM A615

In foundations

D	#5 bars	40	Lbs.
---	---------	----	------

In columns

E	#5 bars	40	Lbs.
---	---------	----	------

In beams

F	#5 bars	55	Lbs.
---	---------	----	------

G	#4 bars	30	Lbs.
---	---------	----	------

In slabs

H	#4 bars	45	Lbs.
---	---------	----	------

In stirrups and the like

I	#3 bars	80	Lbs.
---	---------	----	------

Sawn formwork to:

J	Sides of foundations	5	SY
---	----------------------	---	----

K	Vertical faces of columns	6	SY
---	---------------------------	---	----

L	Sides and soffit of beams	6	SY
---	---------------------------	---	----

Structure

Reinforced insitu concrete 3000 psi at 28 days  
¾" aggregate

M	In beams	1	CY
---	----------	---	----

N	In beam filling between timber rafters at 2'0" centres	1	CY
---	--	---	----

Reinforcement to ASTM A615

In stiffeners

O	#4 bars	85	Lbs.
---	---------	----	------

In beams and upstand beams

P	#5 bars	55	Lbs.
---	---------	----	------

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		To Collection	\$
<u>Security Booth (Cont'd)</u>			
A	#4 bars	20	Lbs.
	<u>In stirrups and the like</u>		
B	#3 bars	40	Lbs.
	<u>Sawn formwork to:</u>		
C	Sides of soffits of beams	7	SY
D	Sides of beamfilling average 10" high cut and fitted between 2" x 6" rafters at 2'0" centres	14	LY
	<u>Blockwork Walls</u>		
	<u>Hollow concrete blockwork 1000 psi laid in 1:3 cement mortar</u>		
	In walls		
E	6" thick	15	SY
	Concrete filling (2000 psi at 28 days) to single core of blockwork reinforced with 1No. ½" dia ht bar		
F	6" thick walls	58	LY
	"Durowall" or similar horizontal mild steel ladder reinforcement laid in		
G	6" thick walls	19	LY
H	Concrete 3000 psi at 28 days in lintel beams	½	CY
I	Reinforcement in ditto	40	Lbs.
J	Sawn formwork to sides and soffit of ditto	4	SY
K	Form concrete sills 10" x 4" once checked, bevelled and grooved on underside, include rebar and formwork	3	LY
	<u>Timber Roof</u>		
	Note: All timber in this section to be treated pitch pine		
L	2" x 8" hips	30	LF
M	2" x 6" rafters	60	LF
N	T111 plywood sheeting ½" thick	88	SF
O	1" x 3" battens	48	LF
P	1" x 12" fascia	32	LF
		To Collection	\$

Security Booth (Cont'd)

A	PVF2 metal roof sheeting 24 gauge screw fixed to battens at 3'0" centres	88	SF	
B	Ditto hip capping	30	LF	
C	Ditto in apex flashing 16" square fixed to sheeting, include for sealing with non-setting sealant	1	No.	
D	Foam filler strip at eave	276	LF	
E	Allow a provisional sum for metal connectors	PROV	SUM	100.00

Windows

Refer to Drawing DA1

Supply and fix the following, include for 8.28mm thick laminated grey tinted glass (3mm glass/2.28mm pvb/3mm glass)

White aluminium horizontal sliding windows

F	Type 1	3	No.	
---	--------	---	-----	--

Doors

Refer to Drawing DA1

Aluminium door with aluminium frames

G	Type D1	1	No.	
---	---------	---	-----	--

Ironmongery

Supply, fit and fix the following:

H	Stainless steel hinges	3	No.	
---	------------------------	---	-----	--

I	Aluminium lever locks, (Note: allow for master and sub-master keying)	1	No.	
---	---	---	-----	--

Weather saddle screwed to concrete

J	3'0" long	1	No.	
---	-----------	---	-----	--

Sundries

K	Caulk around frames with non-setting sealant	20	LY	
---	--	----	----	--

Floor Finishes

L	12" x 12" Porcelain floor tiles fixed with adhesive and grouted with acid resistant grout	3	SY	
---	---	---	----	--

To Collection

\$

Security Booth (Cont'd)

Skirtings

A 1" x 6" wpp skirting once bevelled, plugged to blockwork 18 LF

Prepare and paint 1 coat primer and 2 coats gloss oil paint on:

B Skirtings girth 6" to 9" 6 LY

Wall Finishes

In-situ Finishes (Internal & External)

Cement/sand render (1:4) 1/2" thick in one coat finished smooth on:

C Concrete/block walls 41 SY

Decoration

Prepare and paint 1 coat concrete primer and 2 coats emulsion paint on:

D Cement/sand render walls 41 SY

Ceiling Finishes

E Timber ceilings 10 SY

Builders Work in Connection with Services

All Provisional

Electrical Installation

Cut and pin the following to blockwork or concrete and afterwards make good

F Distribution panel 1 No.

G Power outlets 2 No.

H Telephone/computer points 1 No.

I Lighting points 2 No.

J Switch points 1 No.

To Collection

\$

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

Security Booth (Cont'd)

Collection

Amount of Page No. EW/7  
Amount of Page No. EW/8  
Amount of Page No. EW/9  
Amount of Page No. EW/10  
Amount of Page No. EW/11

Amount of Security Booth  
To External Works Summary

\$

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

**EXTERNAL WORKS**

**SUMMARY**

Amount of Roads, Car Park and Concrete Paving from Page No. EW/2  
Amount of Surface Water Drainage from Page No. EW/3  
Amount of Soil and Waste Drainage from Page No. EW/4  
Amount of Builders Work in Connection with Services from Page No. EW/6  
Amount of Security Booth from Page No. EW/12

Amount of External Works  
To Tender Summary

\$

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

## **MEP INSTALLATION**

**NOTE:** This section of the Bills of Quantities has been prepared by the M&E Consultant and has not been measured in accordance with the Standard Method of Measurement of Building Works Fifth Edition Imperial. Tenderers are to price this section in accordance with the Specifications and Drawings issued with the tender documents and must complete the enclosed Summary of Prices. The total cost of the MEP Installation is to be carried to the Tender Summary.



**SIR MC. CHESNEY GEORGE SECONDARY SCHOOL**

***BILL OF MATERIALS -  
MEP INSTALLATION SERVICES***

**DOCUMENT NO.: 1207-3-GE-10-009-1**

**MECHANICAL INSTALLATIONS -  
MEASURED WORKS**





**ELECTRICAL INSTALLATIONS -  
MEASURED WORKS**

	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
	<b>POWER DISTRIBUTION</b>				
A	TR-1, 400Y208-120V, 3-phase, 35kVA, Dry-Type Ventilated, ES Shielded	1	Nr		
B	<b>SITC Panel Boards (See panel schedule 1207-2-EL-SH-60 (Sheets 1 to 10) MEM or equivalent to BS SPEC.</b>				
	<u>All panels are to be complete with feeder breakers as detailed in panel schedules</u>				
B1	Main Distribution MDP-1; 400/230, 3-ph, 300A 12Way, TP	1	Nr		
B2	Emergency Load Centre MDP-E; 230V, 3-ph, 100A 12Way, SP	1	Nr		
B3	3-PH, 208/120V Distribution panels P120-B; 12Way SP	1	Nr		
B4	1-PH, 12W-SP, 230V Distribution Panels LP-A1 -24W,SP LP-B1/C1/D1 - 12W,SP	1 3	Nr. Nr.		
C.	<b><u>SITC RECEPTACLES (complete with wall boxes)</u></b>				
	<b>All switches and receptacles to be flush in wall</b>				
C1	230V duplex wall receptacle with face plate	88	Nr		
C2	230V duplex wall receptacle weather proof	4	Nr		
C3	230V GFCI duplex wall receptacle with face plate	15	Nr		
C4	120V duplex wall receptacle with face plate	12	Nr		
D.	<b><u>SITC IN-SCREED WIREMOLD BOXES (complete with 1-Ethernet Port and 1-230V and 1-120V receptacles)</u></b>	2	Nr		
E.	<b><u>SITC SWITCHES (complete with wall boxes)</u></b>				
	<b>All switches and receptacles to be flush in wall</b>				
E1	20A, 230V, 1-way switch; with face plate	9	Nr		
E2	20A, 230V, 3-way switch; with face plate	4	Nr		
E3	Occupancy Sensor (ceiling/surface mount) 230V operation	14	Nr		
E4	External Photocell (230V)	2	Nr		
E5	20A, 230V, 1-way kry-operated switch; with face plate (all switches to operate from a single master key)	7	Nr		
			To Collection		
	ES/1				





	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
A	<p><b>STIC for LIGHTING</b></p> <p><b>All fixtures are to have LED equivalent lamps or as otherwise described. See Lighting Schedule</b></p> <p><b>Equivalent luminaries are to be used if those specified are not obtainable, but must first be approved by the Engineer.</b></p> <p><b>Lighting Fixtures (see schedule)</b></p>				
A1	G1: Delray Lighting ST2P4/HOW35	47	Nr		
A2	G2.: Cooper Industries TRE-11	33	Nr		
A3	G3A.: Cooper Corelite Series R2	33	Nr		
A4	G3B: LSI Industries LPD	13	Nr		
A5	G4: Surface Cooper Vapourtite industrial (VTI)	20	Nr		
A7	G10: Selux Corporation, SDS-1-F26-R3-xx-P1-xx-xx-stand alone solar pole mounted securioty light.	25	Nr		
	ES/4		To Collection	\$	



Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>COLLECTION</b>				
Page Nr ES/1				
Page Nr ES/2				
Page Nr ES/3				
Page Nr ES/4				
Page Nr ES/5				
<b>ELECTRICAL INSALLATIONS - MEASURED WORK</b>	<b>To Summary</b>			
ES/6				

**PLUMBING INSTALLATIONS -  
MEASURED WORKS**





	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>SANITARY INSTALLATIONS (SUPPLY AND INSTALL)</b>					
<b>Sanitary Appliances as "Zurn" or other equal and approved</b>					
A	White vitreous china washbasin "Wentworth" Ref 120114E size 590mm x 497mm with 1Nr tap hole, Zurn mechanical Water Saving Tap, (70197Q4) 1 1/4" metal bottle trap with 75mm seal, one chromium plated slotted waste 50mm diameter, chromium plated water supply connector and control valve 12mm diameter and fix to blockwork	12	Nr		
B	<b>Water Closet</b> White vitreous china, Zurn high efficiency, dual flush 1 .6 gpf [6 Lpf] - 1 .0 gpf [3 .78 Lpf], pressure-assisted tank, high performance EcoFlush technology, easy touch handle actuation, ultra quiet flush, siphon jet flush action, ADA height, 2-1/8" fully glazed trapway, operating pressure range 20-125 psi, elongated front rim, chrome-plated handle, large water surface area, bolt caps, floor-mounted toilet . Model Z5562	4	Nr		
C	<b>Water Closet with Conceal Flush Valve</b> White vitreous china, Zurn 1 .6 gpf high efficiency, ADA floor-mounted, model Z5667-BWL bottom outlet toilet with siphon jet flushing action, elongated front rim, 2-1/8" fully glazed trapway, and 1-1/2" back spud with Concealed, quiet dia-phragm-type, rough brass flushometer valve with Zurn AquaVantage® TPE, chlo-ramine resistant, dual seal diaphragm with a clog resistant, triple filtered by-pass . Model Z6140AV-WS1	7	Nr		
<b>Urinal</b>					
To Collection				\$	
MPM/3					

	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
	<b>Sanitary Installations (Cont'd)</b>				
	<b>Sanitary Appliances as "Zurn" or other equal and approved (Cont'd)</b>				
	<b>Urinal</b>				
A	Washware Essentials Ltd Floor recessed slab urinal manufactured from 1.2mm thick stainless steel with satin finish, 2100mm L x 340 W. Polished flat end panels suitable for wall fixing and is design to be recessed into floor. Waste Outlet left 38mm (1.5") BSP dome grateed waste fitting. Vandal resistant square horizontal sparge pipe flushing system. End panels suitable for butting to side wall. Back entry connection with a concealed cistern and downpipe.	1	Nr		
B	"Bobrick" satin finished stainless steel surface mounted mounted vandal proof liquid soap dispenser with concealed wall fastener and fix	10	Nr		
C	White vitreous china semi-recessed toilet roll holder "Mayfair" Ref 2053100 size 150mm x 150mm and fix in blockwork	11	Nr		
	<b>Kitchen Sink</b>				
D	Stainless steel kitchen sink 550mm x 825mm with double bowl and double drainer with 2Nr 2Nr chromium plated pillar taps 12mm diameter, overflow, stopper chain and stay, waste outlet 38mm diameter and fix in worktop chain and stay, waste outlet 38mm	12	Nr		
			To Collection		\$

MPM/4



	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>Sanitary Installations (Cont'd)</b> <b><u>Extra over PVC Class B pipe for:-</u></b>					
A	Splay cut end to overflow pipe 12mm diameter	1	lot		
B	Bend 12mm diameter	1	lot		
C	Bend 38mm diameter	1	lot		
D	Bend 50mm diameter	1	lot		
E	Bend 110mm diameter	1	lot		
F	Sanitary tee 38mm diameter	1	lot		
G	Sanitary tee 50mm diameter	1	lot		
H	Ditto 110mm diameter	1	lot		
I	Ditto 150mm diameter	1	lot		
J	Wye 38mm diameter	1	lot		
K	Ditto 50mm diameter	1	lot		
L	Ditto 110mm diameter	1	lot		
M	Cleanout plug and adaptor 38mm diameter	1	lot		
N	Cleanout plug and adaptor 50 mm diameter	1	lot		
O	Cleanout plug and adaptor 110 mm diameter	1	lot		
		To Collection		\$	
MPM/6					



DOC. TITLE: BILL OF MATERIALS - PLUMBING INSTALLATIONS

	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>School Lab Installation</b>					
A	Laboratory grade single sinks	21	Nr		
B	Airone 1000R filtration fume cabinet	1	Nr		
C	2-way Gas Cocks set at 90 deg. Typ. BROEN range of gas drop lever type manufactured to BS 1552 working pressure 5 psi fitted with claw system to ensure valves do not rotate on the bench.	19	ea		
D	Vacuum Break faucets, PVDF per ASTM D 3222; typ. ORION GNF 10 VB	22	ea		
E	pHpro Chemical Drainage System Neutralizing Tank Model:T6 with Lightweight PE Resin, Inground Gasketed & Bolted Cover & wide range of Monitoring Accessories.	1	Nr		
To Collection				\$	
MPM/8					



DOC. TITLE: BILL OF MATERIALS - PLUMBING INSTALLATIONS

	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>Gas piping Installation (Cont'd)</b>					
A	20mm NPT California Seismic Valve, Model 300	3	Nr		
B	Twin Cylinder Automatic Changeover Regulator with 2 x 500mm pigtails with non return valve	3	Nr		
C	Copper Pigtail with pol end fitting, silver Soldered to 5mm diameter copper tube and 7/16" unf male flare or as required for Appliance	12	Nr		
D	Copper Pigtail with pol end fitting, silver Soldered to 5mm diameter copper tube and 7/16" unf male flare or as required for gas cock	19	Nr		
To Collection				\$	
MPM/10					



	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
	<b>Cold Water Installation</b>				
	<b>PVC-U Class D pipe and fittings to BS 3505:1986 with solvent cement joints</b>				
A	Service pipe 15mm diameter and fix to blockwork or concrete with fixing clips	1	lot		
B	Ditto 20mm diameter	1	lot		
C	Ditto 25mm diameter	1	lot		
D	Ditto 40mm diameter	1	lot		
E	Ditto 50mm diameter	1	lot		
	<b>Extra over PVC pipe Class D for:-</b>		lot		
F	Bend 15mm diameter	1	lot		
G	Bend 20mm diameter	1	lot		
H	Bend 25mm diameter	1	lot		
I	Bend 40mm diameter	1	lot		
J	Bend 50mm diameter	1	lot		
K	Reducer 15mm diameter	1	lot		
L	Reducer 25mm diameter	1	lot		
M	tee 15mm diameter	1	lot		
N	Ditto 20mm diameter	1	lot		
O	Ditto 25mm diameter	1	lot		
P	Ditto 40mm diameter	1	lot		
N	Ditto 50mm diameter	1	lot		
			To Collection		\$



	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
	<b>Hot Water Installation</b>				
A	<b>Fix only</b> Solar Water Heater 60 Gallon integral Tank and two solar collectors	2	Nr		
	<b>CPVC pipe and fittings to BS3505:1986 with solvent cement joints</b>				
B	Service pipe 15mm diameter and fix to blockwork or concrete with fixing clips	1	Lot		
C	Ditto 20mm diameter	1	lot		
	<b>Extra over CPVC pipe Class D for:-</b>				
D	Bend 15mm diameter	1	lot		
E	Ditto 20mm diameter	1	lot		
F	tee 15mm diameter	1	lot		
G	Ditto 20mm diameter	1	lot		
	<b>Grease Interceptor</b>				
H	ZURN Z1172 Large capacity Acid Resistant Coated interior and exterior fabricated steel grease interceptor, rated at 250 GPM and 500 Lbs. Grease capacity, with internal air relief by-pass, bronze cleanout plug and visible double wall trap seal with removable pressure equalizing/flow diffusing baffle. Gasketed non-skid secured cover with removable lift handles, complete with flow control fitting.	2	Nr		
			To Collection		\$

DOC. TITLE: BILL OF MATERIALS - PLUMBING INSTALLATIONS

	Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
	<b>Marking Positions</b>				
A	Allow for marking the position of chases  and the like in the structure for the plumbing and engineering installations	1	lot		
	<b>Testing the Installations</b>				
B	Allow for testing and flushing the sanitary, cold water water installation to the satisfaction of the Architect and the relevant Statutory Authority	1	lot		
	<b>BUILDER'S WORK</b>				
C	<b>Septic Tank</b> Construction: 6230mm x 2080mm X 1650 deep (internal dimension) two part compartment tank, 153MM thick base, 3 concrete access cover with plug and 2 vent and soakaway per detail	1	lot		
D	Excavate trench for pipe 50mm and 100 mm diameter for starting at pump room level for an average depth of 750mm including grading and compacting bottom, planking and strutting, earth backfilling and disposal of surplus spoil from site	1	lot		
E	Cut or form hole for small pipe through reinforced concrete slab 150mm thick and make good	1	lot		
F	Cut or form mortice 75mm deep in reinforced concrete slab for floor drain with outlet 50mm diameter and make good	6	Nr		
G	<b>CONTINGENCY SUM</b> Include the Provisional Sum to be expended as instructed by the Engineer				
			To Collection	\$	30,000.00

Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>MEASURED WORK</b>				
<b>COLLECTION</b>				
Page Nr. MPM/1				
Page Nr. MPM/2				
Page Nr. MPM/3				
Page Nr. MPM/4				
Page Nr. MPM/5				
Page Nr. MPM/6				
Page Nr. MPM/7				
Page Nr. MPM/8				
Page Nr. MPM/9				
Page Nr. MPM/10				
Page Nr. MPM/11				
Page Nr. MPM/12				
Page Nr. MPM/13				
Page Nr. MPM/14				
Page Nr. MPM/15				
<b>TOTAL MEASURED WORK</b>				\$
MPM/16				

Item Description	Qty	Unit	Rate	Amount <u>\$ . c</u>
<b>SUMMARY</b>				
Preliminaries brought forward				
Measured Work	MPM/16			
<b>TOTAL - PLUMBING AND SUPPLY &amp; INSTALLATION</b>				\$
	MPS/1			

**MEP INSTALLATIONS -  
SUMMARY**

		<u>Page Nr</u>		Amount <u>\$ . c</u>
<b><u>SUMMARY</u></b>				
<b>Preliminaries</b>				
<b>Measured Work - Mechanical</b>				
MPS/1				
<b>Measured Work - Electrical</b>				
ES/5				
<b>Measured Work - Plumbing</b>				
MS/2				
<b>TOTAL - MEP INSTALLATIONS</b>				
MEP/1				

## **DAYWORKS**

## **DAYWORKS**

### DAYWORKS

- A Where work arising under a variation ordered by the Architect cannot properly be measured and valued, the Sub-contractor shall be paid on a daywork basis. Such payments shall be the sum of the prime cost of such work calculated in accordance with the following 'Definitions of Prime Cost of Daywork' and in the percentage additions to each section of the prime cost of the rates set out hereunder by the Contractor.

### DEFINITION OF PRIME COST OF DAYWORK

- B This definition applies to daywork carried out under or incidental to this building contract but does not cover daywork ordered by the Architect to be carried out after the date of commencement of the Defects Liability Period, which may be the subject of a separate agreement.

### SECTION (1) - LABOUR

- C 1.1 The standard wage rates, emoluments and expenses referred to below and the standard working hours referred to in 1.2 are those laid down for the time being in the rules or decisions of agreements of the Barbados Workers Union and the Sub-contractor, applicable to the works (or those of such other body as may be appropriate) and to the grade of operative concerned at the time when and the area where the daywork is executed.
- D 1.2 Hourly base rates for labour are computed by dividing the annual prime cost of labour based upon the standard working hours and as defined in 1.4 by the number of standard working hours per annum.
- E 1.3 The hourly rates computed in accordance with 1.2 shall be applied in respect of the time spent by operatives directly engaged on daywork, including those operating mechanical plant and transport and erecting and dismantling other plant (unless otherwise expressly provided in the contract) and handling and distributing the materials and goods used in the daywork.
- F 1.4 The annual prime cost of labour comprises the following:
- (a) Standard weekly earnings (ie. the standard working week as determined at the appropriate rate for the operative concerned).
  - (b) Any supplemental payments.
  - (c) Any guaranteed minimum payments (unless included in Section 3.1 (a) - (p)).
  - (d) Merit money.
  - (e) Differentials or extra payments in respect of skill, responsibility, discomfort, inconvenience or risk (excluding those in respect of supervisory responsibility - see 1.5).
  - (f) Payments in respect of public holidays.
  - (g) Any amounts which may become payable by the contractor to or in respect of operatives arising from the rules etc., referred to in 1.1 which are not provided for in 1.4 (a) - (f) nor in Section 3.1 (a) - (p).
  - (h) Employer's contributions to the Annual Holiday with Pay and Welfare Benefits Scheme or payments in lieu thereof.
  - (i) Employer's National Insurance contributions as applicable to 1.4 (h).
  - (j) Any contribution, levy or tax imposed by Statute, payable by the contractor in his capacity as an employer.

DAYWORKS (Cont'd)

- A 1.5 Differentials or extra payments in respect of supervisory responsibility are excluded from the annual prime cost. The time of principals, staff, foremen, charge hands and the like when working manually is admissible under this Section at the rates for the appropriate grades.

SECTION (2) - MATERIALS

- B 2.1 The prime cost of materials and goods obtained specifically for the daywork is the invoice cost after deducting all trade discounts and any portion of cash discounts in excess of 5 per cent.
- C 2.2 The prime cost of all other materials and goods used in the daywork is based upon the current market prices plus any appropriate handling charges.
- D 2.3 The prime cost referred to in 2.1 and 2.2 includes the cost of delivery to site.

SECTION (3) - PLANT

- E 3.1 Unless otherwise stated in the contract, the prime cost of plant comprises the cost of the following:
- (a) use or hire of mechanically operated plant and transport for the time employed on and/or provided or retained for the daywork;
  - (b) use of non-mechanical plant (excluding non-mechanical hand tools) for the time employed on and/or provided or retained for the daywork;
  - (c) transport to and from site and erection and dismantling where applicable.
- F 3.2 The use of non-mechanical hand tools and of erected scaffolding, staging, trestles or the like is excluded (see Section 6), unless specifically retained for the daywork.

SECTION (4) - OVERHEADS

- G Overheads for the purpose of this contract shall mean the following:
- (1) Head Office charges
  - (2) Site supervision
  - (3) Overtime other than that allowed under Section (1)(4)
  - (4) Time lost due to inclement weather
  - (5) Bonuses and all other incentive payments.

**DAYWORKS** Cont'd)

- (6) Apprentices' study leave
  - (7) Employer's contribution to National Insurance including graduated pensions
  - (8) Contributions for annual and public holidays
  - (9) Fares and time allowances for traveling
  - (10) Subsistence and periodic leave allowances
  - (11) Safety and welfare facilities
  - (12) Third party and employer's liability insurances
  - (13) Sick pay or insurance in respect thereof
  - (14) Tool allowances.
  - (15) Use, repair and sharpening of small tools
  - (16) All non mechanically operated plant, erected scaffolding and staging and trestles, protective clothing, artificial lighting, storage facilities and the like that may be in general use on the site
  - (17) All other liabilities and obligations whatsoever.
- A Overheads as defined above and profit shall be dealt with by means of percentage addition to the totals of Prime Cost in each of the aforementioned sections (1), (2) and (3) at the rates stated hereafter.

DAYWORKS (Cont'd)

LABOUR

A	Include the Provisional Sum of for Daywork labour	\$	4,000.00
B	Allow for percentage addition on Prime Cost of labour for Profit & Overheads	%	

MATERIALS

C	Include the Provisional Sum of for Daywork materials	\$	2,000.00
D	Allow for percentage addition on Prime Cost of materials for Profit & Overheads	%	

PLANT

E	Include the Provisional Sum of for Daywork plant	\$	1,000.00
F	Allow for percentage addition on Prime Cost of plant for Profit & Overheads	%	

-----  
TO TENDER SUMMARY \$ -----  
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**Daywork Schedule**

- A For works to be executed on a daywork basis and instructions, the Contractor shall insert a rate against the items mentioned below on which the tender is based on.
- B Rates for plant under “A” below shall include fuel, oil and all consumable items but shall exclude wages of operator, workmen, loaders or watching.
- C Payment shall be made for “working time” and “movement time” only. “Standing time” shall not be paid for. Breakdowns in “working time” periods shall not be paid for.
- D Rates for plant under “B” below are to be inclusive of drivers, loaders, banksman etc and all items necessary.

**Plant “A”**

Caterpillar type tractor (D4 or equal)	per hour
Caterpillar type tractor (D6 or equal)	“ “
Caterpillar type tractor (D7 or equal)	“ “
Caterpillar type tractor (D8 or equal)	“ “
Ditto but equipped to operate a bull or angle dozer	“ “
Rooter 3 type heavy pattern	“ “
Motor blade grader - all up weight 8 tonne	“ “
Motor blade grader - all up weight 19 tonne	“ “
Scraper 0.6m <sup>3</sup> capacity	per hour
Scraper 1m <sup>3</sup> capacity	“ “
Portable compressor with 3 jack hammers (or other attachments) with 20m hoses and steel	“ “
Roller 2/3 tonne	“ “
Roller 5/8 tonne	“ “
Roller 5/10 tonne	“ “

Roller 10/12 tonne	“	“
Dumper-self driven 3m <sup>3</sup>	“	“
Ditto 4m <sup>3</sup>	“	“
Pumps petrol driven with hoses and fittings:		
50mm	“	“
75mm	“	“
100mm	“	“
150mm	“	“
2 tonne truck	“	“
2 tonne tipping truck	“	“
3 tonne truck	“	“
4 tonne truck	“	“
6 Tonne truck	“	“
7/5 closed drum concrete mixer	“	“
10/7 closed drum concrete mixer	“	“
0.3m <sup>3</sup> excavator with face shovel, skimmer dragline or back actor equipment	“	“
0.5m <sup>3</sup> ditto	“	“
0.6m <sup>3</sup> ditto	“	“
0.76m <sup>3</sup> ditto	“	“
0.95m <sup>3</sup> ditto	“	“
Mobile crane, please _____	“	“
specify _____		
_____		
_____		

**Plant “A” (cont’d)**

Tower crane, please specify	_____	per hour
	_____	
	_____	
Pneumatic drills		“ “
Arch welding equipment		“ “
Concrete vibrator		“ “
Hoist, please specify	_____	“ “
	_____	
	_____	

**Plant “B”**

Truck for transport - per ton mile (measured as single journey - i.e. rates to be quoted are for the round trip which would be twice the kilometer listed hereunder).		“ “
0 - 1km per m <sup>3</sup>		“ “
2 - 3km per m <sup>3</sup>		“ “
3 - 4km per m <sup>3</sup>		“ “
4 - 90km per m <sup>3</sup>		“ “
10 – km per m <sup>3</sup>		“ “
15 – km per m <sup>3</sup>		“ “
20 – km per m <sup>3</sup>		“ “
Hoist and operator		“ “
3 tonne lorry and driver		“ “

5 tonne lorry and driver	“	“
Mechanical pump and operator	“	“
Arc-welder including equipment	“	“
Pneumatic earth consolidator and operator	“	“
Compressor, pneumatic drills or paving breakers and operator	“	“
10S - concrete mixer and operator	“	“
Mobile crane and operator	“	“
Concrete vibrator and operator	“	“
Tower crane and operator	“	“

**A Dayworks Schedule (cont'd)**

**Labour**

Excavator general labour		per hour
Craftsmen	“	“
Craftsmen labourer	“	“
Reinforcement bender	“	“
Reinforcement fixer	“	“
Concretor	“	“
Concretor's labourer	“	“
Fitter	“	“
3 tonne lorry driver	“	“
5 tonne lorry driver	“	“
Mechanical pump operator	“	“

Arc-welder including equipment	“	“
Painter	“	“
Pneumatic earth consolidator operator	“	“
Compressor, pneumatic drills or paving breaker operator	“	“
10S - concrete mixer operator	“	“
Mobile crane operator	“	“
Concrete vibrator operator	“	“
Tower crane operator	“	“
Blocklayer	“	“
Blocklayer's labourer	“	“
Roofer	“	“
Roofer's labourer	“	“
Plumber	“	“
<b>DAYWORKS (Cont'd)</b>		
Drain layer	“	“
Carpenter	“	“
Joiner	“	“
Plasterer	“	“
Hoist operator	“	“

**SIR MCCHESENEY GEORGE SECONDARY SCHOOL**

**TENDER SUMMARY**

Amount of Preliminaries	from Page No. P/25	
Amount of Block A	from Page No. BQ/13	
Amount of Block B	from Page No. BQ/18	
Amount of Block C	from Page No. BQ/16	
Amount of Work to Existing Buildings	from Page No. BQ/3	
Amount of External Works	from Page No. EW/13	
Amount of MEP Installation	from Page No. MEP/1	
Amount of Dayworks	from Page No. DW/4	
Fringe Benefits (as Preliminaries)		
Third Party Insurance		
Insurance Against Fire, etc.		
Contingencies		80,000.00
Profits & Overheads (if not previously included)		

**TOTAL TO FORM OF TENDER**

\$

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

## **PART 3** – Conditions of Contract and Contract Forms

## **Section VII. General Conditions of Contract**

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

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

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## General Conditions of Contract

### A. General

#### 1. Definitions

- 1.1 Boldface type is used to identify defined terms.
- (a) The Accepted Contract Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
  - (b) The Activity Schedule is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
  - (c) The Adjudicator is the person appointed jointly by the *Employer* and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
  - (d) Bank means the financing institution **named in the PCC**.
  - (e) Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.
  - (f) Compensation Events are those defined in GCC Clause 41 hereunder.
  - (g) The Completion Date is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 52.1.
  - (h) The Contract is the Contract between the *Employer* and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
  - (i) The Contractor is the party whose Bid to carry out the Works has been accepted by the *Employer*.
  - (j) The Contractor's Bid is the completed bidding document submitted by the Contractor to the *Employer*.
  - (k) The Contract Price is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
  - (l) Days are calendar days; months are calendar months.

- (m) Dayworks are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- (n) A Defect is any part of the Works not completed in accordance with the Contract.
- (o) The Defects Liability Certificate is the certificate issued by the Project Manager upon correction of defects by the Contractor.
- (p) The Defects Liability Period is the period **named in the PCC** pursuant to Sub-Clause 33.1 and calculated from the Completion Date.
- (q) ~~Adjudicator means the single person appointed under Clause 23.~~
- (r) Drawings means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the *Employer* in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
- (s) The *Employer* is the party who employs the Contractor to carry out the Works, **as specified in the PCC**.
- (t) Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- (u) "In writing" or "written" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- (v) The Initial Contract Price is the Contract Price listed in the *Employer's* Letter of Acceptance.
- (w) The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the PCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- (x) Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- (y) Plant is any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.

- (z) The Project Manager is the person **named in the PCC** (or any other competent person appointed by the *Employer* and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- (aa) PCC means Particular Conditions of Contract
- (bb) The Site is the area **defined as such in the PCC**.
- (cc) Site Investigation Reports are those that were included in the bidding documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- (dd) Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- (ee) The Start Date is **given in the PCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- (ff) A Subcontractor is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- (gg) Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- (hh) A Variation is an instruction given by the Project Manager which varies the Works.
- (ii) The Works are what the Contract requires the Contractor to construct, install, and turn over to the *Employer*, **as defined in the PCC**.

## 2. Interpretation

- 2.1 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 2.2 If sectional completion is **specified in the PCC**, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than

references to the Completion Date and Intended Completion Date for the whole of the Works).

- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
- (a) Agreement,
  - (b) Letter of Acceptance,
  - (c) Contractor's Bid,
  - (d) Particular Conditions of Contract,
  - (e) General Conditions of Contract,
  - (f) Specifications,
  - (g) Drawings,
  - (h) Bill of Quantities,<sup>5</sup> and
  - (i) any other document **listed in the PCC** as forming part of the Contract.

- 3. Language and Law** 3.1 The language of the Contract and the law governing the Contract are **stated in the PCC**.
- 4. Project Manager's Decisions** 4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between the *Employer* and the Contractor in the role representing the *Employer*.
- 5. Delegation** 5.1 Otherwise specified in the PCC, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.
- 6. Communications** 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.
- 7. Subcontracting** 7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of the *Employer* in writing. Subcontracting shall not alter the Contractor's obligations.
- 8. Other Contractors** 8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the *Employer* between the dates given in the Schedule of Other Contractors,

<sup>5</sup> In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."

as **referred to in the PCC**. The Contractor shall also provide facilities and services for them as described in the Schedule. The *Employer* may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

- 9. Personnel and Equipment**
- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 9.2 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
- 10. Employer's and Contractor's Risks**
- 10.1 The *Employer* carries the risks which this Contract states are *Employer's* risks, and the Contractor carries the risks which this Contract states are Contractor's risks.
- 11. Employer's Risks**
- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are *Employer's* risks:
- (a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
    - (i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
    - (ii) negligence, breach of statutory duty, or interference with any legal right by the *Employer* or by any person employed by or contracted to him except the Contractor.
  - (b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the *Employer* or in the *Employer's* design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 11.2 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is an *Employer's* risk except loss or

damage due to

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

## **12. Contractor's Risks**

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

## **13. Insurance**

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

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

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

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

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.

13.5 Both parties shall comply with any conditions of the insurance

policies.

- 14. Site Data** 14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the PCC**, supplemented by any information available to the Contractor.
- 15. Contractor to Construct the Works** 15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
- 16. The Works to Be Completed by the Intended Completion Date** 16.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
- 17. Approval by the Project Manager** 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 17.2 The Contractor shall be responsible for design of Temporary Works.
- 17.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 17.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 17.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
- 18. Safety** 18.1 The Contractor shall be responsible for the safety of all activities on the Site.
- 19. Discoveries** 19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the *Employer*. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.
- 20. Possession of the Site** 20.1 The *Employer* shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the PCC**, the *Employer* shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
- 21. Access to the** 21.1 The Contractor shall allow the Project Manager and any person

- Site** authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
- 22. Instructions, Inspections and Audits**
- 22.1 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 22.2 The Contractor shall permit the Bank to inspect the Contractor's accounts, records and other documents relating to the submission of bids and contract performance and to have them audited by auditors appointed by the Bank. The Contractor shall maintain all documents and records related to the Contract for a period of *three (3)* years after completion of the Works. The Contractor shall *provide* any documents necessary for the investigation of allegations of fraud, *collusion*, *coercion*, or corruption and require its employees or agents with knowledge of the Contract to respond to questions from the Bank.
- 23. Appointment of the Adjudicator**
- 23.1 The Adjudicator shall be appointed jointly by the *Employer* and the Contractor, at the time of the *Employer's* issuance of the Letter of Acceptance. If, in the Letter of Acceptance, the *Employer* does not agree on the appointment of the Adjudicator, the *Employer* will request the Appointing Authority **designated in the PCC**, to appoint the Adjudicator within 14 days of receipt of such request.
- 23.2 Should the Adjudicator resign or die, or should the *Employer* and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the *Employer* and the Contractor. In case of disagreement between the *Employer* and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the PCC** at the request of either party, within 14 days of receipt of such request.
- 24. Procedure for Disputes**
- 24.1 If the Contractor believes that a decision taken by the Project Manager was either outside the authority given to the Project Manager by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Project Manager's decision.
- 24.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 24.3 The Adjudicator shall be paid by the hour at the **rate specified in the PCC**, together with reimbursable expenses of the types

**specified in the PCC**, and the cost shall be divided equally between the *Employer* and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision shall be final and binding.

24.4 The arbitration shall be conducted in accordance with the arbitration procedures published by the institution named and in the place **specified in the PCC**.

## **B. Time Control**

### **25. Program**

25.1 Within the time **stated in the PCC**, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.

25.2 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.

25.3 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period **stated in the PCC**. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount **stated in the PCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.

25.4 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.

### **26. Extension of the Intended Completion Date**

26.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the

Contractor to incur additional cost.

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

**27. Acceleration**

27.1 When the *Employer* wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If the *Employer* accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both the *Employer* and the Contractor.

27.2 If the Contractor's priced proposals for an acceleration are accepted by the *Employer*, they are incorporated in the Contract Price and treated as a Variation.

**28. Delays  
Ordered by  
the Project  
Manager**

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

**29. Management  
Meetings**

29.1 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

29.2 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to the *Employer*. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

**30. Early  
Warning**

30.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as

reasonably possible.

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

### **C. Quality Control**

- 31. Identifying Defects** 31.1 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.
- 32. Tests** 32.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.
- 33. Correction of Defects** 33.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is **defined in the PCC**. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 33.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.
- 34. Uncorrected Defects** 34.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

### **D. Cost Control**

- 35. Contract Price** 35.1 In the case of an admeasurement contract, the Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.
- 35.2 In the case of a lump sum contract, the Activity Schedule shall

contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. *If payment for Materials on Site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.*

### **36. Changes in the Contract Price**

36.1 In the case of an admeasurement contract:

- (a) If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change.
- (b) The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of the *Employer*.
- (c) If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

36.2 In the case of a lump sum contract, the Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.

### **37. Variations**

37.1 All Variations shall be included in updated Programs, and, in the case of a lump sum contract, also in the Activity Schedule, produced by the Contractor.

37.2 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.

37.3 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.

37.4 If the Project Manager decides that the urgency of varying the

work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

37.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

37.6 In the case of an admeasurement contract, if the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 38.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work.

### **38. Cash Flow Forecasts**

38.1 When the Program, or, in the case of a lump sum contract, the Activity Schedule, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

### **39. Payment Certificates**

39.1 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.

39.2 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.

39.3 The value of work executed shall be determined by the Project Manager.

39.4 The value of work executed shall comprise:

(a) In the case of an admeasurement contract, the value of the quantities of work in the Bill of Quantities that have been completed; or

(b) In the case of a lump sum contract, the value of work executed shall comprise the value of completed activities in the Activity Schedule.

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

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

#### 40. Payments

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

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

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

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

#### 41. Compensation Events

41.1 The following shall be Compensation Events:

- (a) The *Employer* does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
- (b) The *Employer* modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- (c) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- (d) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.

- (e) The Project Manager unreasonably does not approve a subcontract to be let.
  - (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
  - (g) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by the *Employer*, or additional work required for safety or other reasons.
  - (h) Other contractors, public authorities, utilities, or the *Employer* does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
  - (i) The advance payment is delayed.
  - (j) The effects on the Contractor of any of the *Employer's* Risks.
  - (k) The Project Manager unreasonably delays issuing a Certificate of Completion.
- 41.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 41.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.
- 41.4 The Contractor shall not be entitled to compensation to the extent that the *Employer's* interests are adversely affected by the Contractor's not having given early warning or not having

cooperated with the Project Manager.

- 42. Tax** 42.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 28 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.
- 43. Currencies** 43.1 Where payments are made in currencies other than the currency of the *Employer's* country **specified in the PCC**, the exchange rates used for calculating the amounts to be paid shall be the exchange rates stated in the Contractor's Bid.
- 44. Price Adjustment** 44.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the PCC**. If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

$$P_c = A_c + B_c \text{ Imc/Ioc}$$

where:

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

$A_c$  and  $B_c$  are coefficients<sup>6</sup> **specified in the PCC**, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

$Imc$  is the index prevailing at the end of the month being invoiced and  $Ioc$  is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

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

<sup>6</sup> *The sum of the two coefficients  $A_c$  and  $B_c$  should be 1 (one) in the formula for each currency. Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the nonadjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other nonadjustable components. The sum of the adjustments for each currency are added to the Contract Price. [To be transferred to the User Guide]*

fluctuations in costs.

- 45. Retention**
- 45.1 The *Employer* shall retain from each payment due to the Contractor the proportion **stated in the PCC** until Completion of the whole of the Works.
- 45.2 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 51.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an “on demand” Bank guarantee.
- 46. Liquidated Damages**
- 46.1 The Contractor shall pay liquidated damages to the *Employer* at the rate per day **stated in the PCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the PCC**. The *Employer* may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor’s liabilities.
- 46.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 40.1.
- 47. Bonus**
- 47.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the PCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.
- 48. Advance Payment**
- 48.1 The *Employer* shall make advance payment to the Contractor of the amounts **stated in the PCC** by the date **stated in the PCC**, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the *Employer* in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor.

Interest shall not be charged on the advance payment.

48.2 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.

48.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

#### **49. Securities**

49.1 The Performance Security shall be provided to the *Employer* no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the PCC**, by a bank or surety acceptable to the *Employer*, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.

#### **50. Dayworks**

50.1 If applicable, the Dayworks rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.

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

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

#### **51. Cost of Repairs**

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

## **E. Finishing the Contract**

- 52. Completion**      52.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.
- 53. Taking Over**      53.1 The *Employer* shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.
- 54. Final Account**      54.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.
- 55. Operating and Maintenance Manuals**      55.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates **stated in the PCC**.
- 55.2 If the Contractor does not supply the Drawings and/or manuals by the dates **stated in the PCC** pursuant to GCC Sub-Clause 55.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the PCC** from payments due to the Contractor.
- 56. Termination**      56.1 The *Employer* or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 56.2 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
  - (b) the Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 28 days;
  - (c) the *Employer* or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

- (d) a payment certified by the Project Manager is not paid by the *Employer* to the Contractor within 84 days of the date of the Project Manager's certificate;
- (e) the Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
- (f) the Contractor does not maintain a Security, which is required;
- (g) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the PCC**; or
- (h) if the Contractor, in the judgment of the *Employer*, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract, pursuant to GCC Clause 57.1.

56.3 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.

56.4 Notwithstanding the above, the *Employer* may terminate the Contract for convenience.

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

## **57. Fraud and Corruption**

57.1 The Bank requires that Recipients (including beneficiaries of Bank loans), as well as Contractors, Subcontractors, manufacturers, and Consultants under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Bank:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
  - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
  - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract;

- (iii) “collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of the Recipient, designed to establish bid prices at artificial, noncompetitive levels; and
  - (iv) “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- (b) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Recipient or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Recipient having taken timely and appropriate action satisfactory to the Bank to remedy the situation; and
  - (c) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that they have, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract.

#### **58. Payment upon Termination**

- 58.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as **indicated in the PCC**. Additional Liquidated Damages shall not apply. If the total amount due to the *Employer* exceeds any payment due to the Contractor, the difference shall be a debt payable to the *Employer*.
- 58.2 If the Contract is terminated for the *Employer's* convenience or because of a fundamental breach of Contract by the *Employer*, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

#### **59. Property**

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

- 60. Release from Performance**
- 60.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the *Employer* or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.
- 61. Suspension of Bank Loan or Grant**
- 61.1 In the event that the Bank suspends the Loan or Grant to the *Employer*, from which part of the payments to the Contractor are being made:
- (a) The *Employer* is obligated to notify the Contractor of such suspension within 7 days of having received the Bank's suspension notice.
  - (b) If the Contractor has not received sums due it within the 28 days for payment provided for in Sub-Clause 40.1, the Contractor may immediately issue a 14-day termination notice.
- 62. Eligibility**
- 62.1 The Contractor shall have the nationality of an eligible country. The Contractor shall be deemed to have the nationality of a country if the Contractor is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.
- 62.2 The materials, equipment and services to be supplied under the Contract shall have their origin in eligible source countries and all expenditures under the Contract will be limited to such materials, equipment, and services. At the Employer's request, the Contractor may be required to provide evidence of the origin of materials, equipment and services.
- 62.3 For purposes of GCC 62.2, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

## **Section VIII. Particular Conditions of Contract**

### **- Contract Data**

## Section VIII. *Particular Conditions of Contract*

Except where otherwise indicated, all PCC should be filled in by the Employer prior to issuance of the Bidding Documents. Schedules and reports to be provided by the Employer should be annexed.

<b>A. General</b>	
<b>GCC 1.1 (d)</b>	The financing institution is: <i>Caribbean Development Bank</i> .
<b>GCC 1.1 (s)</b>	The <i>Employer</i> is <i>Government of Antigua and Barbuda Ministry of Education</i> .
<b>GCC 1.1 (iv)</b>	The period for construction is 18 months.
<b>GCC 1.1 (z)</b>	The Project Manager is <i>Moulton Mayers Architects, McKies Hill, Kingstown, St. Vincent</i> .
<b>GCC 1.1 (aa)</b>	The Site is located at <i>at Sir McChesney George Secondary School, Barbuda</i> and is defined in drawings - <i>refer to drawing schedule</i> .
<b>GCC 1.1 (ee)</b>	The Start Date shall be <i>within 21 days of date of Letter of Acceptance</i> .
<b>GCC 1.1 (ii)</b>	The Works consist of <i>the alterations and extension to the existing school</i> .
<b>GCC 2.2</b>	Sectional Completions are: <i>N/A</i> .
<b>GCC 2.3(i)</b>	The following documents also form part of the Contract: <i>N/A</i> .
<b>GCC 3.1</b>	The language of the contract is <i>English</i> .  The law that applies to the Contract is the law of <i>Antigua and Barbuda</i> .
<b>GCC 5.1</b>	The Project manager <i>may not</i> delegate any of his duties and responsibilities.
<b>GCC 8.1</b>	Schedule of other contractors: <i>[insert Schedule of Other Contractors, if appropriate]</i>
<b>GCC 13.1</b>	The minimum insurance amounts and deductibles shall be: <ul style="list-style-type: none"> <li>(a) for loss or damage to the Works, Plant and Materials: <i>contract amount plus 10%</i>.</li> <li>(b) For loss or damage to Equipment: <i>US\$185,000.00</i>.</li> <li>(c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract <i>US\$370,000.00</i>.</li> </ul>

	<p>(d) for personal injury or death:</p> <p>(i) of the Contractor's employees: <i>US\$925,000.00.</i></p> <p>(ii) of other people: <i>US\$925,000.00.</i></p>
<b>GCC 14.1</b>	Site Data are: <i>Soils Report</i>
<b>GCC 20.1</b>	The Site Possession Date(s) shall be: <i>within 21 days of Letter of Acceptance.</i>
<b>GCC 23.1 &amp; GCC 23.2</b>	Appointing Authority for the Adjudicator: <i>President of the Barbados Institute of Architects.</i>
<b>GCC 24.3</b>	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: <i>to be agreed.</i>
<b>GCC 24.4</b>	<p>Institution whose arbitration procedures shall be used: <i>Arbitration Laws of Antigua and Barbuda.</i></p> <p>The place of arbitration shall be: <i>Antigua.</i></p>
<b>B. Time Control</b>	
<b>GCC 25.1</b>	The Contractor shall submit for approval a Program for the Works within <i>14</i> days from the date of the Letter of Acceptance.
<b>GCC 25.3</b>	<p>The period between Program updates is <i>60</i> days.</p> <p>The amount to be withheld for late submission of an updated Program is <i>US\$500.00.</i></p>
<b>C. Quality Control</b>	
<b>GCC 33.1</b>	The Defects Liability Period is: <i>365</i> days.
<b>D. Cost Control</b>	
<b>GCC 43.1</b>	The currency of the <i>Employer's</i> country is: <i>EC dollars.</i>
<b>GCC 44.1</b>	<p>The Contract <i>is not</i> subject to price adjustment in accordance with GCC Clause 44, and the following information regarding coefficients <i>does not</i> apply.</p> <p>The coefficients for adjustment of prices are:</p> <p>(a) For currency [<i>insert name of currency</i>]:</p> <p>(i) [<i>insert percentage</i>] percent non adjustable element (coefficient A).</p>

	<p>(ii) <i>[insert percentage]</i> percent adjustable element (coefficient B).</p> <p>(b) For currency <i>[insert name of currency]</i>:</p> <p>(i) <i>[insert percentage]</i> percent non adjustable element (coefficient A).</p> <p>(ii) <i>[insert percentage]</i> percent adjustable element (coefficient B).</p> <p>The Index I for local currency shall be <i>[insert index]</i>.</p> <p>The Index I for the specified international currency shall be <i>[insert index]</i>.</p> <p><i>[These proxy indices shall be proposed by the Contractor, subject to acceptance by the Employer]</i></p> <p>The Index I for currencies other than the local currency and the specified international currency shall be <i>[insert index]</i>.</p> <p><i>[These proxy indices shall be proposed by the Contractor, subject to acceptance by the Employer.]</i></p>
<b>GCC 45.1</b>	The proportion of payments retained is: <b>5%</b> .
<b>GCC 46.1</b>	The liquidated damages for the whole of the Works are <b>US\$1,000.00</b> per day. The maximum amount of liquidated damages for the whole of the Works is <b>10%</b> of the final Contract Price.
<b>GCC 47.1</b>	The Bonus for the whole of the Works is <b>\$0 (zero)</b> per day. The maximum amount of Bonus for the whole of the Works is <i>[insert percentage]</i> of the final Contract Price.
<b>GCC 48.1</b>	The Advance Payments shall be: <b>10% of accepted contract amount</b> and shall be paid to the Contractor no later than <b>30 days after contract signing and approval of all bonds and insurances.</b>
<b>GCC 49.1</b>	<p>The Performance Security amount is <b>10%</b> <i>denominated in the types and proportions of the currencies in which the Contract Price is payable, or in a freely convertible currency acceptable to the Employer]</i></p> <p>(a) Bank Guarantee: <b>10% of accepted contract amount.</b></p> <p>(b) Performance Bond: <b>30% of accepted contract amount.</b></p> <p><i>[A <b>Bank Guarantee</b> shall be unconditional (on demand) (see Section X. Security Forms). A <b>Performance Bond</b> is an undertaking by a bonding or insurance company (surety) to complete the construction in the event of default by the Contractor, or to pay the amount of the Bond to the Employer. An amount of 30 percent of the Contract Price is commonly used internationally for this type of security (see Section X. Security Forms).]</i></p>

<b>E. Finishing the Contract</b>	
<b>GCC 55.1</b>	<p>The date by which operating and maintenance manuals are required is <b><i>14 days after Certificate of Completion.</i></b></p> <p>The date by which “as built” drawings are required is <b><i>60 days after Certificate of Completion.</i></b></p>
<b>GCC 55.2</b>	The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required in GCC 55.1 is <b><i>US\$4,000.00.</i></b>
<b>GCC 56.2 (g)</b>	The maximum number of days is: <b><i>150 days.</i></b>
<b>GCC 58.1</b>	The percentage to apply to the value of the work not completed, representing the <i>Employer’s</i> additional cost for completing the Works, is <b><i>10%.</i></b>

## **Section IX - Contract Forms**

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

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# 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 . . . . .  
. *[insert name of the contract and identification number, as given in the Appendix to Bid]* . . . . .  
for the Accepted Contract Amount of the equivalent of . . . . . *[insert amount in numbers  
and words and name of currency]*, as corrected and modified in accordance with the Instructions  
to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with  
the Conditions of Contract, using for that purpose the of the Performance Security Form  
included in Section IX (Contract Forms) of the Bidding Document.

***[Choose one of the following statements:]***

We accept that \_\_\_\_\_ *[insert the name of Adjudicator proposed by the  
Bidder]* be appointed as the Adjudicator.

***[or]***

We do not accept that \_\_\_\_\_ *[insert the name of the Adjudicator proposed by  
the Bidder]* be appointed as the Adjudicator, and by sending a copy of this Letter of  
Acceptance to \_\_\_\_\_ *[insert name of the Appointing  
Authority]*, the Appointing Authority, we are hereby requesting such Authority to appoint the  
Adjudicator in accordance with ITB 42.1 and GCC 23.1.

Authorized Signature: .....

Name and Title of Signatory: .....

Name of Agency: .....

Attachment: Contract Agreement

## Contract Agreement

THIS AGREEMENT made the . . . . . day of . . . . ., . . . . ., between . . . . .  
*[name of the Employer]*. . . . . (hereinafter “the *Employer*”), of the one part, and . . . . . *[name*  
*of the Contractor]*. . . . .(hereinafter “the *Contractor*”), of the other part:

WHEREAS the *Employer* desires that the Works known as . . . . . *[name of the Contract]*. . . .  
 .should be executed by the Contractor, and has accepted a Bid by the Contractor for the  
 execution and completion of these Works and the remedying of any defects therein,

The *Employer* and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
  - (a) the Letter of Acceptance
  - (b) the Bid
  - (c) the Addenda Nos . . . . . *[insert addenda numbers if any]*. . . . .
  - (d) the Particular Conditions
  - (e) the General Conditions;
  - (f) the Specification
  - (g) the Drawings; and
  - (h) the completed Schedules,
3. In consideration of the payments to be made by the *Employer* to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the *Employer* to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The *Employer* hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of . . . . . *[name of the borrowing country]*. . . . .on the day, month and year indicated above.

Signed by: \_\_\_\_\_  
for and on behalf of the *Employer*

Signed by: \_\_\_\_\_  
for and on behalf the Contractor

in the  
presence of: \_\_\_\_\_  
Witness, Name, Signature, Address, Date

in the  
presence of: \_\_\_\_\_  
Witness, Name, Signature, Address, Date

## Performance Security

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

**Beneficiary:** ..... *[Name and Address of Employer]* .....

**Date:** .....

**Performance Guarantee No.:** .....

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

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Contractor, we . . . . . *[name of the Bank]*. . . . . hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of . . . . . *[name of the currency and amount in figures]*<sup>1</sup>. . . . . ( . . . . . *[amount in words]*. . . . . ) such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the . . . . . Day of . . . . . , . . . . .<sup>2</sup>, and any demand for payment under it must be received by us at this office on or before that date.

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

.....  
*[Seal of Bank and Signature(s)]*

**Note –**

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

<sup>1</sup> *The Guarantor shall insert an amount representing the percentage of the Contract Price specified in the Contract and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Employer.*

<sup>2</sup> *Insert the date twenty-eight days after the expected completion date. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date*

*established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

## Advance Payment Security

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

**Beneficiary:** ..... *[Name and Address of Employer]* .....

**Date:** .....

**Advance Payment Guarantee No.:** .....

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

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum . . . . . *[name of the currency and amount in figures]*<sup>1</sup>. . . . . ( . . . . . *[amount in words]*. . . . . ) is to be made against an advance payment guarantee.

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

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

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that eighty (80) percent of the Contract Price has been certified for payment, or on the . . . day of . . . . . , . . . . .<sup>2</sup>, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

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

. . . . . *[Seal of Bank and Signature(s)]*. . . . .

**Note –**

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

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

2 *Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.*