



GOVERNMENT OF BELIZE
MINISTRY OF WORKS

CONTRACT DOCUMENT

Project: Corozal to Sarteneja Road Upgrading

**CONTRACT BETWEEN
MINISTRY OF WORKS
AND
Overseas Engineering & Construction Co. LTDA, S.A.**

CONTRACT NO: 183 8/19/20

DATE ISSUED: *21st October, 2019*

Employer: Ministry of Works, Government of Belize



MEMORANDUM
Ministry of Finance

31

Ref: Ten/6/01/19(31) Vol. VI
To: Chief Executive Officer, Ministry of Works
From: Financial Secretary, Ministry of Finance

Subject: Project: Corozal to Sarteneja Road Upgrading by
Loan Agreement between the Republic of China and Belize
Use of the Limited Tendering Procedure

Date: October 7, 2019

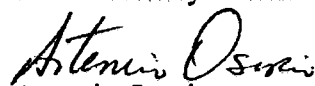
I refer to your memorandum DPW/48/19(07) dated September 30, 2019 as well as the accompanying draft contracts between the Government of Belize (GOB) and the Contractor.

After a perusal of the draft contract the Ministry of Finance has no objection to the award of contract to **Overseas Engineering & Construction Company LTDA. S.A.**, of Taiwan, Republic of China (ROC), for the design, execution and construction supervision of the upgrading of the Corozal – Sarteneja Road inclusive of the construction of two bridges – one at Pueblo Nuevo and the other at Laguna Seca, at a total cost of US \$50.0 million dollars, exclusive of all taxes. The Works are to be carried out over 54 months.

This project will be financed by a bilateral loan from the Republic of China. The **Overseas Engineering & Construction Company LTDA. S.A.** is 100% owned by the **Overseas Investment & Development Corporation** of Taiwan ROC to enhance bilateral relations between Taiwan ROC and countries with whom it has diplomatic relations and to fulfill its international obligations.

As the financing is from the bilateral program of economic cooperation between the ROC and Belize the tender has been restricted to direct contracting to the above named company. Consequently, the Ministry of Finance has no objection to the use of the Limited Tendering Procedure under section 21(1)(d) (public interest) of the Finance and Audit Act, Chapter 15 of the Laws of Belize, 2011 ed.

In the interim to the appointment of a new Contractor General, kindly submit the draft contract(s) to the Attorney General for his perusal and comment before said contract is executed.


Artemio Osorio
For Financial Secretary

c. Accountant General
Auditor General
Contractor General
Attorney General
Director General, BTS

14



Attorney General's Ministry

Tel: (501) 822-2504/822-0519 Fax: (501) 822-3390
Belmopan, Belize, Central America

Ref: LEM/3/01/19 (38)

9th October, 2019

Mr. Errol Gentle
Chief Executive Officer
Ministry of Works
Power Lane
Belmopan, Cayo

Dear Sir:

Re: Contract- Corozal to Sarteneja Road Upgrading, Corozal District : Overseas Engineering & Construction Co. Ltda, S.A. (OECC) of Taiwan


We refer to the captioned matter.

Please be advised that the Chambers of the Attorney General has thoroughly perused the captioned contract, and has no objections to the contents. We are therefore, certifying that the contract is proper for execution.

If you have any questions or concerns, please do not hesitate to contact our Office.

Regards,


ELISA MONTALVO
SOLICITOR GENERAL


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CONTENTS

Section	Title
Section 1	Contract Agreement, Finance Agreement, Letter of Acceptance
Section 2	Contract Data – Particular Conditions
Section 3	General Conditions of Contract and Conditions of Particular Application
Section 4	Scope of Work

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SECTION 1

Contract Agreement,
Financial Agreement
and
Letter of Acceptance


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CONTRACT AGREEMENT

This Agreement made the 21st day of October 2019

Between **MINISTRY OF WORKS, GOVERNMENT OF BELIZE** of **Power Lane, Belmopan, Belize, Central America** (hereinafter called "the Employer") of the one part and **Overseas Engineering & Construction Co. LTDA, S.A. (OECC) of THE REPUBLIC OF CHINA ON TAIWAN** (hereinafter called "the Contractor ") of the other part

Whereas the Employer desires that the Works/Services known as the **COROZAL TO SARTENEJA ROAD UPGRADING PROJECT** should be executed by the Contractor and has accepted a PROPOSAL by the Contractor for the completion of the design and construction and supervision of these Works and the remedying of any defects therein, in the amount of:

UNITED STATES DOLLARS FIFTY MILLION (US\$50,000,000.00) (Tax-free); distributed as follows; Design Cost - US\$1.5M (Tax free); Construction Cost - US\$45.35 M (Tax free); Supervision Cost - US\$3.15 (Tax free) for a period of 54 months;

Whereas the Financing of the Project is provided by a loan from the EXIM Bank to the Government of Belize of United States Dollars Fifty Million (US\$50,000,000.00) exclusively for the execution of the Project.

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meaning as are respectively assigned to them in the Terms and Conditions of Contract hereinafter 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.
 - i. the Letter of Acceptance
 - ii. the Contractor's Proposal
 - iii. the Particular Conditions (Contract Data)
 - iv. the General Conditions;
 - v. the Specification
 - vi. the Drawings shall be attached to this agreement after final approval from the Ministry of Works; and
 - vii. the Schedules, which will be completed upon approved final design,
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works/services 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/services and the remedying of defects therein the Contract Price or such other sum as may become payable under the provision 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 the day and year first before written in accordance with the Laws of the Government of Belize.

SIGNED by:

Signature:

Name: **HON. RENE MONTERO**

Position: **MINISTER OF WORKS**

SIGNED by:

Signature:

Name: **HSHAO, YUN-YEH**

Position: **Legal Representative**



for and on behalf of the **Employer** in the presence of,

Witness:

Name: **ERROL GENTLE**

CHIEF EXECUTIVE OFFICER
CHIEF EXECUTIVE OFFICER
MINISTRY OF **Works**

Date:

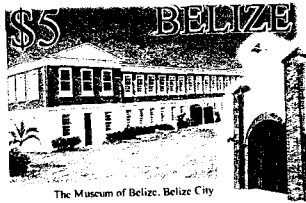
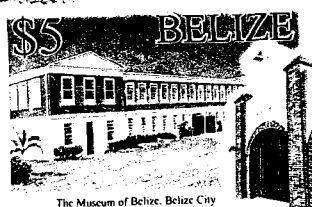
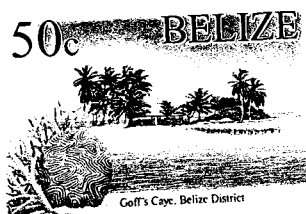
for and on behalf of the **Contractor** in the presence of,

Witness:

Name:

Address:

Date:



LETTER OF ACCEPTANCE

To: Chairman of Board
Overseas Engineering & Construction Co. LTDA, S.A.

Address

RE: Notification of Award: COROZAL TO SARTENEJA ROAD UPGRADING

This is to notify you that your proposal dated 21st October 2019 for the **COROZAL TO SARTENEJA ROAD UPGRADING PROJECT** for the Accepted Contract Amount of the equivalent of **UNITED STATES DOLLARS FIFTY MILLION (USD \$50,000,000.00)** **(Tax-free), distributed as follows; Design Cost - US\$1.5M (Tax free); Construction Cost - US\$45.35M (Tax free); Supervision Cost - US\$3.15 (Tax free) for a period of 54 months,** is hereby accepted by the Ministry of Works, Government of Belize.

You are hereby requested to furnish the Performance Guarantee letter issued by the parent company OI DC within 28 days in accordance with the Conditions of Contract, using for that purpose the Performance Security Form as approved by the Employer.

We hereby instruct you to proceed with the design and execution of the said Works in accordance with the provisions of the Contract documents.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Employer: Ministry of Works, The Government of Belize.

FINANCE AGREEMENT

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FINANCE AGREEMENT

THIS AGREEMENT made this 21st day of *October*, Two Thousand and Nineteen BETWEEN:
THE GOVERNMENT OF BELIZE represented by, Ministry of Works for and on behalf of the
Government of Belize hereinafter referred to as THE EMPLOYER AND Overseas Engineering
& Construction Co. LTDA, S.A. hereinafter referred to as THE CONTRACTOR

Whereas THE CONTRACTOR is a construction company contracted by THE EMPLOYER to
design and execute the Project: **Corozal to Sarteneja Road Upgrading** as per the schedule given
in Appendix 1, hereinafter referred to as THE WORKS

And whereas THE CONTRACTOR has agreed to undertake THE WORKS

THE EMPLOYER has undertaken to pay the cost of said financing of THE WORKS and
undertakes to be wholly and solely responsible for the payment thereof to THE CONTRACTOR
in the manner hereinafter mentioned.

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NOW THESE PRESENTS WITNESSETH THAT:

PAYMENT AMOUNT: THE EMPLOYER covenants to repay to THE CONTRACTOR the total sum of UNITED STATES DOLLARS FIFTY MILLION (\$50,000,000.00) (Tax-free)

1. Which sum is hereinafter referred to as THE PAYMENT AMOUNT.
2. THE PAYMENT AMOUNT COMPRISES;
 - I. I. Design Cost - US\$1.5M (Tax free)
 - II. II. Construction Cost - US\$45.35M (Tax free)
 - III. Supervision Cost - US\$3.15 (Tax free) for a period of 54 months
3. PAYMENT PERIOD: PAYMENT to the Contractor will be made in due time within Forty Three (43) calendar days, counted from the date on which the complete and correct payment claim is established, accepted and approved by the Employer.
4. PAYMENT SCHEDULE:
 - A.) ADVANCE PAYMENT: Upon the signing of this Contract Agreement, the Employer will make an advance payment, interest-free, for mobilization and cash flow support to the Contractor in the amount of United States Dollars Twelve Million Five Hundred Thousand (US\$12,500,000), equivalent to Twenty-five (25%) of the Contract Amount, subject to the provision by the Contractor to the Employer of a Guarantee Letter which shall be provided by his parent company, Overseas Investment & Development Corp. (OIDC) for the Repayment of the Lump Sum Advance Payment Amount.



The advance payment shall be released to the Contractor in the same procedure as stipulated under Article 3 of these Financial Requirements. The Contractor, however, shall be entitled to the reduction of the percentage of amount of the advance payment, corresponding to the progressive reduction resulting from the Contractor's monthly repayments.

B.) MONTHLY PROGRESS PAYMENT: The Contractor shall submit a monthly payment claim to the Employer for approval, at the end of every calendar month, showing the valuation of the progress of work done within that period, based on the Bill of Quantities (BOQ). The monthly payment claim shall be released to the Contractor in the same manner as indicated on the above Article 2.

5. PAYMENT PROCEDURE:

For the work progress payment, the Contractor shall submit the payment claim to the Employer within five (5) working days after the expiration of the calendar month; the Employer shall conduct a review of the contractor's claim with due diligence and within 30 days shall approve payment for value of works accomplished based on his review.

All payments to the Contractor will be made by bank transfer through the following banking information, or to the account as changed by the Contractor in writing as a result of bank financing needs and due anticipation to the Employer:

Please T/T to:
Intermediary Bank: Bank of New York, New York, USA
SWIFT CODE: IRVTUS3N
Beneficiary Bank: CTBC BANK Co., Ltd.
Bank Address :

9F, No. 168, JIngmao 2nd Road, TAIPEI CITY, TAIWAN
A/C No.015-14-1000682
SWIFT CODE : CTCBTWTP

Beneficiary Customer Name:
Overseas Engineering & Construction Co. Ltda. S.A.
Beneficiary Address : 12F. No. 760, Bade Rd. Sec. 4, Songshan District,
Taipei City 10567, Taiwan, Republic of China

In Consideration of the payments to be made by THE EMPLOYER to THE CONTRACTOR, as hereinafter mentioned, THE CONTRACTOR hereby covenants with THE EMPLOYER to assume the cost of and to pay for design, execution of the works and construction supervision of the Works as determined by the Ministry of Works, Government of Belize. THE Contractor shall also be wholly responsible to remedy any defects therein, at his own cost, in conformity with the provisions of the terms and conditions of the Contract.


6. THE EMPLOYER hereby covenants to pay THE CONTRACTOR, in consideration of the design and execution inclusive of monies to cover construction supervision of THE WORKS (the term "completion of 'THE WORKS'" shall be defined as completed according to the specifications and terms and conditions of the contract).
7. The acceptance of the offer specified herein constitutes the agreement of the Government of Belize to be wholly and solely responsible for the payment of the cost of said works to THE CONTRACTOR in the manner herein mentioned. This obligation is not revocable at any time but may be transferred at any time by THE CONTRACTOR to any financier under its existing conditions as already set forth herein.
8. For clarification:

The total of all payment certificates approved by the Government of Belize represented by the Ministry of Work shall be honored and paid by the Funding Bank in accordance with the terms of the Agreement;

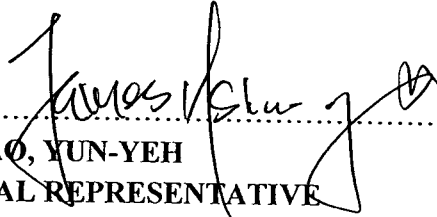
The Final Payment Claim shall supersede all Interim Payment Certificates, as per Sub clause 14.13 of the Contract document;

Should, for whatsoever reason, the Government of Belize terminate the Construction Contract with OECC the Government of Belize agrees to honor payment for all amounts due to the Contractor in accordance with Sub clause 15.4 (Payment after Termination) and in keeping with the relevant terms of the Financing Agreement;

Thus SIGNED:-


.....
ERROL GENTLE
CHIEF EXECUTIVE OFFICER - MINISTRY OF WORKS
For THE GOVERNMENT OF BELIZE

AND



.....
HSIAO, YUN-YEH
LEGAL REPRESENTATIVE
Overseas Engineering & Construction Co. Ltda, S.A.




SECTION 2

CONTRACT DATA


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CONTRACT DATA

<u>Item</u>	<u>Sub-Clause</u>	<u>Data</u>
Employer's name and address	1.1.2.2&1.3	Government of Belize, Ministry of Works, Power Lane, Belmopan
Contractor 's name and address	1.1.2.3 &1.3	Overseas Engineering & Construction Co. Ltda, S.A.
Project Coordinator's name and address	1.1.2.4 &1.3	The Project Coordinator Project Execution Unit Corozal Sarteneja Road Upgrade
Time for Completion of the Works	1.1.3.3	Fifty-four (54) months from the commencement date, for Design and Construction stage
Defects Notification Period	1.1.3.7	Fifty Two (52) calendar weeks beginning from when the Taking-Over Certificate is issued for each road segment. Considering that the whole Works are composed of several road segments, the Contractor shall undertake maintenance activities immediately after the formal issuance by the Employer of Taking-Over Certificate for each of the substantially completed road segment of the Project, while the total defects notification/maintenance period of the Project shall not go beyond the 52-calendar weeks' duration after the completion of the last road segment of the whole Works.
Governing Law	1.4	The law in force is that of Belize
Ruling language	1.4	English
Language for communications	1.4	English
Amount of Performance Guarantee	4.2	10% of contract amount
Normal working hours	6.5	Monday-Friday: 8 hours Saturday: 5 hours
Delay damages for the Works	8.7&14.15(b)	Liquidated damages to a maximum of 2.5% of contract sum applies.
Maximum amount of delay damages	8.7	Liquidated damages to a maximum of 2.5% of contract sum applies.


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Initials of signatory

<u>Item</u>	<u>Sub-Clause</u>	<u>Data</u>
Total advance payment	14.2	25% of the Accepted Contract Amount
Start repayment of advance payment	14.2(a)	Total of all certified interim payments exceeds 25% of Accepted Contract Amount
Repayment amortization of advance payment	14.2(b)	Twenty-five Percent (25%) of the amount of each Interim payment certificate
Percentage of Retention	14.3	5% Percent per certificate, and 2.5% of the penultimate certificate.
Limit of Retention Money	14.3	Five (5) Percent of Contract Amount
Minimum amount of Interim Progress Certificates	14.6	Not Applicable
Rate of Interest on Unpaid sums	14.8	Not Applicable
Number of Copies of Statement at Completion and Final Statement	14.10 & 14.11	6 No.
Currencies of Payment	14.15	US Dollar
Periods for submission of Insurances:	18.1	45 days from contract signing, extendable with reasonable request by the Contractor
Maximum amount of deductibles for Insurance of the Employer's risk	18.2 (d)	The minimum insurance amounts and deductibles shall be: (a) for loss or damage to the Works, Plant and Materials: BZD 10,000,000.00 with allocation for unlimited occurrence with a limit of BZD2,000,000 per occurrence. (b) For loss or damage to Equipment: BZD 4,000,000. (c) for loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract BZD 4,000,000. (d) for personal injury or death: (i) of the Contractor's employees: BZD 2,000,000. (ii) of other people: BZD 2,000,000.
Minimum amount of third party Insurance	18.3	

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SECTION 3

CONDITIONS OF CONTRACT

Handwritten signature
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GOVERNMENT OF BELIZE
MINISTRY OF WORKS

COROZAL TO SARTENEJA ROAD UPGRADING PROJECT

CONDITIONS OF CONTRACT


1 General Provisions

1.1 Definitions

In the Conditions of Contract ("these Conditions"), which include the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1 The Contract

- 1.1.1.1 "**Contract**" means the Contract Agreement, the Letter of Acceptance, these Conditions, the Schedules, the Contractor 's Proposal, and the further documents:(a) Agreement, (b) Letter of Acceptance, (c) Contractor's Proposal, (d) Special Conditions of Contract, (e) General Conditions of Contract, (f) Specifications, (g) Drawings, shall be attached to this agreement after final approval from the Ministry of Works, and (h) any other document listed in the SCC / Contract Data Sheet as forming part of the Contract..
- 1.1.1.2 "**Contract Agreement**" means the Contract Agreement (if any) referred to in Sub-Clause 1.6 [Contract Agreement].
- 1.1.1.3 "**Letter of Acceptance**" means the letter of formal acceptance, signed by the Employer, of Proposal, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such Letter of Acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.1.5 "**Schedules**" means the document(s) entitled Schedules, completed by the Contractor and submitted with the Proposal, as included in the Contract. Such document may include data, lists and Schedules of payments and/or prices.
- 1.1.1.6 "**Contractor 's Proposal**" means the document entitled proposal, which the Contractor submitted, as included in the Contract. Such document may include the Contractor's preliminary design.
- 1.1.1.7 "**Contract Data**" means the completed pages entitled Contract Data which are appended to and form part of the Proposal.


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1.1.1.8 "**Schedule of Guarantees**" and "Schedule of Payments" mean the documents so named (if any) which are comprised in the Schedules.

1.1.2 Parties and Persons

1.1.2.1 "**Party**" means the Employer or the Contractor, as the context requires.

1.1.2.2 "**Employer**" means the person named as Employer in the Contract Data and the legal successors in title to this person. The Employer is the Government of Belize, represented by the Ministry of Works (MOW) and includes the Employer's representatives or successors.

1.1.2.3 "**Contractor**" means the person(s) named as Contractor in the Proposal accepted by the Employer and the legal successors in title to this person(s).

1.1.2.4 "**Project Coordinator**" means the person appointed by the Employer to act as the Project Coordinator for the purposes of the Contract and named in the Contract Data, or any other competent person appointed by the Employer and notified to the Contractor under Sub-Clause 3.4 [Replacement of the Project Coordinator].

1.1.2.5 "**Contractor 's Representative**" means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor 's Representative], who acts on behalf of the Contractor.

1.1.2.6 "**Employer's Personnel**" means the Project Coordinator, the assistants referred to in Sub-Clause 3.2 [Delegation by the Project Coordinator] and all other staff, labor and other employees of the Project Coordinator and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Project Coordinator, as Employer's Personnel.

1.1.2.7 "**Contractor 's Personnel**" means the Contractor 's Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labor and other employees of the Contractor and of each Sub-contractor ; and any other personnel assisting the Contractor in the execution of the Works.

1.1.2.8 "**Sub-contractor**" means any person named in the Contract as a Sub-contractor, or any person appointed as a Sub-contractor, for a part of the Works; and the legal successors in title to each of these persons.

1.1.3 Dates, Tests, Periods and Completion

1.1.3.1 "**Base Date**" means the date 28 days prior to the latest date for submission of the Proposal.

1.1.3.2 "**Commencement Date**" means the date notified under Sub-Clause 8.1 [Commencement of Works].

1.1.3.3 "**Time for Completion**" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Contract Data (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.

1.1.3.4 "**Tests on Completion**" means the tests which are specified in the Contract or agreed by

both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.

- 1.1.3.5 **"Taking-Over Certificate"** means a certificate issued under Clause 10 [Employer's Taking Over].
- 1.1.3.6 **"Tests after Completion"** means the tests (if any) which are specified in the Contract and which are carried out under Clause 12 [Tests after Completion] after the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.7 **"Defects Notification Period"** means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], as stated in the Contract Data (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].
- 1.1.3.8 **"Performance Certificate"** means the certificate issued under Sub-Clause 11.9 [Performance Certificate].
- 1.1.3.9 "day" means a calendar day and "year" means 365 days.

1.1.4 Money and Payments

- 1.1.4.1 **"Accepted Contract Amount"** means the amount accepted in the Letter of Acceptance for the design, execution and completion of the Works and the remedying of any defects.
- 1.1.4.2 **"Contract Price"** means the price defined in Sub-Clause 14.1 [The Contract Price] and includes adjustments in accordance with the Contract.
- 1.1.4.3 **"Cost"** means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.
- 1.1.4.4 **"Final Payment Certificate"** means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].
- 1.1.4.5 **"Final Statement"** means the Statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].
- 1.1.4.6 **"Foreign Currency"** means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.
- 1.1.4.7 **"Interim Payment Certificate"** means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.
- 1.1.4.8 **"Local Currency"** means the currency of the Country.
- 1.1.4.9 **"Payment Certificate"** means a payment certificate issued under Clause 14 [Contract Price and Payment].
- 1.1.4.10 **"Provisional Sum"** means a sum (if any), which is specified in the Contract as a Provisional Sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

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- 1.1.4.11 "**Retention Money**" means the accumulated Retention Moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].
- 1.1.4.12 "**Statement**" means a Statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

1.1.5 Works and Goods

- 1.1.5.1 "**Contractor's Equipment**" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employers Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 "**Goods**" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 "**Materials**" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only Materials (if any) to be supplied by the Contractor under the Contract.
- 1.1.5.4 "**Permanent Works**" means the Permanent Works to be designed and executed by the Contractor under the Contract.
- 1.1.5.5 "**Plant**" means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.
- 1.1.5.6 "**Section**" means a part of the Works specified in the Contract Data as a Section (if any).
- 1.1.5.7 "**Temporary Works**" means all Temporary Works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 "**Works**" mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.1.6 Other Definitions

- 1.1.6.1 "**Contractor's Documents**" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature supplied by the Contractor under the Contract; as described in Sub-Clause 5.2 [Contractor's Documents].
- 1.1.6.2 "**Country**" means the Country in which the Site (or most of it) is located, where the Permanent Works are to be executed.
- 1.1.6.3 "**Employer's Equipment**" means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Employer's Requirements; but does not include Plant which has not been taken over by the Employer.
- 1.1.6.4 "**Force Majeure**" is defined in Clause 19 [Force Majeure].

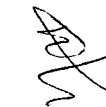
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- 1.1.6.5 "Laws" means all national (or state) legislation, statutes, ordinances and other Laws, and regulations and by-Laws of any legally constituted public authority.
- 1.1.6.6 "Guarantee Letter" means the security (or securities, if any) under Sub-Clause 4.2 [Guarantee Letter].
- 1.1.6.7 "Site" means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 "Unforeseeable" means not reasonably foreseeable by an experienced Contractor by the date for submission of the Proposal.
- 1.1.6.9 "Variation" means any change to the Employer's Requirements or the Works, which is instructed or approved as a Variation under Clause 13 [Variations and Adjustments].

1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and
- (d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.


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The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

1.3 Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and
- (b) Delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Data. However:
- (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
- (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued. Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Project Coordinator, a copy shall be sent to the Project Coordinator or the other Party, as the case may be.

1.4 Law and Language

The Contract shall be governed by the law in force in the country of Belize, stated in the Contract Data.

If there are versions of any part of the Contract, which are written in more than one language, the version, which is in the ruling language stated in the Contract Data, shall prevail.

The language for communications shall be that stated in the Contract Data. If no language is stated there, the language for communications shall be the language in which the Contract (or most of it) is written.

1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement,
- (b) the Letter of Acceptance,
- (c) Contract Data/ Particular Conditions
- (d) General Conditions,
- (e) the Specifications
- (f) the Drawing,
- (g) Schedules,
- (h) Other Documents

If an ambiguity or discrepancy is found in the documents, the Project Coordinator shall issue any necessary clarification or instruction as to the prevalence of the Contract Documents

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1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 60 days after the Contractor receives the Letter of Acceptance, unless agreed otherwise. The Contract Agreement shall be based upon the form annexed to these Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Contractor.

1.7 Assignment

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

- (a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and
- (b) may, as security in favor of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

1.8 Care and Supply of Documents

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Project Coordinator six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Contractor's Documents, and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect of a technical nature in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9 Errors in the Employer's Requirements

Due to the nature of this contract (design/build), Employer shall not be held responsible for any additional costs or delays that may be incurred by the Contractor due to a fault in the design. However, unforeseen situations which could not have been anticipated by an experienced contractor will undoubtedly be subject to Sub-Clause 20.1 [Contractor's Claims].

Also, Contractor may have entitlement to claim additional payment and/or time extension, if by any case the Employer requests to make changes to the design and works done after the Project has been completed and received.

1.10 Employer's Use of Contractor's Documents

As agreed between the Parties, the Ministry of Works, Government of Belize shall have all copyrights of all documents prepared by the Contractor in respect to the design and execution of the Works. The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This license shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) Chief Engineer's Computer is supplied by the Employer and for him to perform his oversight functions he should have access to the AutoCad drawings for the Road Designed by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third Party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

1.11 Contractor's Use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor may, at his Cost, copy, use, and obtain communication of these documents for the


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purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third Party by the Contractor, except as necessary for the purposes of the Contract.

1.12 Confidential Details

The Contractor shall disclose all such confidential and other information as the Project Coordinator may reasonably require in order to verify the Contractor's compliance with the Contract.

The Contractor shall treat the Contract and everything contained therein as private and confidential. In particular the Contractor shall not publish any information, drawing or photograph concerning the Works and shall not use the Site for the purpose of advertising, except with the written consent of the Project Coordinator and subject to such conditions he may prescribe.

1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws:

- (a) the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the Specifications as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and
- (b) the Contractor shall give all notices, all taxes, duties and fees exempted, obtain all permits, licenses and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

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1.14 Joint and Several Liabilities

If the Contractor constitutes (under applicable Laws) a joint venture, consortium or other unincorporated grouping of two or more persons:

- (a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;
- (b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and
- (c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

1.15 Bribery

Any commission, advantage, gift, gratuity, reward or bribe proved to have been given, promised or offered by or on behalf of the Contractor or his agent or servant, or any other person on his or their behalf to the Employer or to the Project Coordinator's Representative or to any of their respective members, officers, servants, advisers, agents or employees to any person on their behalf or on behalf of any of them in relation to obtaining or to the execution of this or of any other Contract with the Employer, may render those persons liable to immediate dismissal from the Site in addition to any criminal liability that may be involved and the Employer may enter upon the Site and the Works and

terminate the employment of the Contractor and the provisions of Clause 15 [*Termination by Employer*] thereof shall apply as if entry and termination had been made pursuant to that claim.

1.16 State of Emergency

In addition to his other responsibilities under the Contract, the Contractor shall comply with any Police or Military Regulations in force in the area of the Works due to a State of Emergency.


1.17 Use of Materials

The Contractor shall ensure that all materials purchased and labor employed to perform the Works, are used in respect of the Works and are not used for any purposes other than the performance of the Works in accordance with the Contract.

2 The Employer

2.1 Right of Access to the Site

The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Contract Data. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Employer's Requirements. However, the Employer may withhold any such right or possession until the Guarantee Letter of parent company O IDC has been received.


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If no such time is stated in the Contract Data, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as may be required to enable the Contractor to proceed in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit.

The Contractor shall observe all agreements entered into by the Employer with any person or persons relating to occupation of the properties by the Employer and to the execution of the Works thereon. The Contractor will be given on request copies of any agreement or part thereof relating to such matters.

The Contractor shall provide any additional land that he may require outside the site for the purposes of the Contract at his own cost.

2.2 Permits, Licenses or Approvals


The Employer shall (where he is in a position to do so) provide reasonable assistance to the Contractor at the request of the Contractor:

- (a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and
- (b) for the Contractor 's applications for any permits, licenses or approvals required by the Laws of the Country:
 - (i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],
 - (ii) for the delivery of Goods, including clearance through customs, and
 - (iii) for the export of Contractor 's Equipment when it is removed from the Site.

2.3 Employer's Personnel

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other Contractors on the Site:

- (a) co-operate with the Contractor 's efforts under Sub-Clause 4.6 [Co-operation], and
- (b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].


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2.4 Employer's Financial Arrangements

The Employer shall submit, within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment].

If the Employer intends to make any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.

2.5 Employer's Claims

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Project Coordinator shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Employers Equipment and Free-Issue Material], or for other services requested by the Contractor .

The notice shall be given as soon as practicable after the Employer became aware of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Project Coordinator shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

2.6 Contractor's Facilities

The Employer shall provide and make available to the Contractor areas necessary for the installation of Contractor's facilities such as temporary offices, accommodations, warehouses, workshops and other related structures within the Site, during the execution of the Works and until the Contractor has completed his clearance and removal from the Site.

2.7 Disposal Areas

The Employer shall assist the Contractor with identifying suitable disposal areas and make available to the Contractor the disposal areas necessary for the disposal of excavated materials surplus, construction wastes and Temporary Works, which are no longer required for the Project. However, the Contractor will be responsible for any costs incurred in using privately owned lands as disposal sites.

3 Project Coordinator

3.1 Project Coordinator's Duties and Authority

The Employer shall appoint the Project Coordinator who shall carry out the duties assigned to him in the Contract. The Project Coordinator's staff shall include suitably qualified Project Coordinators and other professionals who are competent to carry out these duties.

The Project Coordinator shall have no authority to amend the Contract.

The Project Coordinator may exercise the authority attributable to the Project Coordinator as specified in or necessarily to be implied from the Contract. If the Project Coordinator is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer undertakes not to impose further constraints on the Project Coordinator's authority, except as agreed with the Contractor.

However, whenever the Project Coordinator exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Project Coordinator shall be deemed to act for the Employer;
- (b) the Project Coordinator has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
- (c) approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Project Coordinator (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.

3.2 Delegation by the Project Coordinator

The Project Coordinator may from time to time assign duties and delegate authority to assistants and may also revoke such assignment or delegation. These assistants may include a resident Project Coordinator, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Project Coordinator shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

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Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Project Coordinator. However:

- (a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Project Coordinator to reject the work, Plant or Materials;
- (b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Project Coordinator, who shall promptly confirm, reverse or vary the determination or instruction.

3.3 Instructions of the Project Coordinator

The Project Coordinator may issue to the Contractor (at any time) instructions which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Project Coordinator, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Project Coordinator or delegated assistant, on any matter related to the Contract. These instructions shall be given in writing.

3.4 Replacement of the Project Coordinator

If the Employer intends to replace the Project Coordinator, the Employer shall, not less than thirty (30) days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Project Coordinator. Any replacement of the Project Coordinator / Resident Engineer by the Employer shall be with someone who has similar or better qualifications and experience than the existing person.

3.5 Determinations

Whenever these Conditions provide that the Project Coordinator shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Project Coordinator shall consult with each Party in an endeavor to reach agreement. If agreement is not achieved, the Project Coordinator shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Project Coordinator shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

4 The Contractor

4.1 Contractor's General Obligations

The Contractor shall design, execute and complete the Works in accordance with the Contract, and shall remedy any defects in the Works. When completed, the Works shall be fit for the purposes for which the Works are intended as defined in the Contract.

The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.


The Works shall include any work which is necessary to satisfy the Specifications, Contractor's Proposal and Schedules, or is implied by the Contract, and all works which (although not mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operation, of the Works.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations, of all methods of construction and of all the Works.

The Contractor shall, whenever required by the Project Coordinator, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No alterations to these arrangements and methods shall be made without the written approval of the Project Coordinator.

4.2 Performance Guarantee Letter

The Contractor shall obtain a Guarantee Letter for proper performance, in the amount and currencies


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stated in the Contract Data, which shall be issued by his parent company, Overseas Investment & Development Corp. (OIDC) a Guarantee Letter. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

Advance payment shall only be granted to the Contractor upon receipt of a satisfactory Performance Guarantee by the Employer. A copy of such Guarantee shall be sent to the Project Coordinator.

The Contractor shall ensure that the Guarantee Letter is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Guarantee Letter specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Guarantee Letter until the Works have been completed and any defects have been remedied.

The Employer shall not make a claim under the Guarantee Letter, except for amounts to which the Employer is entitled under the Contract in the event of:

(a) failure by the Contractor to extend the validity of the Guarantee Letter as described in the preceding paragraph, in which event the Employer may claim the full amount of the Guarantee Letter,

(b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Sub-Clause 2.5 [Employer's Claims] or Clause 20 [Claims, Disputes and Arbitration], within 42 days after this agreement or determination,

(c) failure by the Contractor to remedy a default within 30 days after receiving the Employer's notice requiring the default to be remedied, or

(d) Circumstances which entitle the Employer to termination under Sub-Clause 15.2 [Termination by Employer], irrespective of whether notice of termination has been given.

The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Guarantee Letter to the extent to which the Employer was not entitled to make the claim.

The Employer shall return the Guarantee Letter to the Contractor within 21 days after receiving a copy of the Performance Certificate.

4.3 Contractor's Representative

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Project Coordinator for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Project Coordinator, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to

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the Project Coordinator's prior consent, and the Project Coordinator shall be notified accordingly. The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Project Coordinator].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Project Coordinator has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative and all these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

4.4 Sub-contractors

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor.

- (a) the Contractor shall not be required to obtain consent to suppliers of Materials, or to a subcontract for which the Sub-contractor is named in the Contract;
- (b) the prior consent of the Project Coordinator shall be obtained to other proposed Sub-contractors; and
- (a) the Contractor shall give the Project Coordinator not less than 28 days' notice of the intended date of the commencement of each Sub-contractor's work, and of the commencement of such work on the Site.

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4.5 Nominated Sub-contractors

In this Sub-Clause, "nominated Sub-contractor" means a Sub-contractor whom the Project Coordinator, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Sub-contractor. The Contractor shall not be under any obligation to employ a nominated Sub-contractor against whom the Contractor raises reasonable objection by notice to the Project Coordinator as soon as practicable, with supporting particulars.

Recommended suppliers, manufacturers and the like, within each of the Specifications are not considered as "Nominated Sub-contractors"

4.6 Co-operation

The Contractor shall, as specified in the Contract or as instructed by the Project Coordinator, allow appropriate opportunities for carrying out work to:

- (a) the Employer's Personnel,
 - (b) any other Contractors employed by the Employer, and
 - (c) the personnel of any legally constituted public authorities,
- who may be employed in the execution on or near the Site of any work not included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to incur unforeseeable Cost. Services for these personnel and other Contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

The Contractor shall be responsible for his construction activities on the Site and shall co-ordinate his own activities with those of other Contractors to the extent (if any) specified in the Employer's Requirements.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Project Coordinator in the time and manner stated in the Employer's Requirements.

4.7 Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels of reference specified in the Contract or notified by the Project Coordinator. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the Works.

The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced Contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent the error could not reasonably have been discovered, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

4.8 Safety Procedures

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Employer's Taking Over], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may

be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

4.9 Quality Assurance

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Project Coordinator shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Project Coordinator for information before each design and execution stage is commenced.

When any document of a technical nature is issued to the Project Coordinator, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

4.10 Site Data

The Employer will list all site data and information in the Special Conditions of Contract which it intends to provide to the contractor. Contractor will be responsible for the collection of all other necessary data to complete its contractual obligations. The Employer shall similarly make available to the Contractor all such data which come into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):

- (a) the form and nature of the Site, including sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- (d) the Laws, procedures and labor practices of the Country of Belize, and
- (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

4.11 Sufficiency of the Accepted Contract Amount

The Contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause

4.10 [Site Data] and any further data relevant to the Contractor 's design.

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor 's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper design, execution and completion of the Works and the remedying of any defects. If, as a result from the final design, the project amount exceeds the contract amount, then the project scopes shall be reviewed.

4.12 Unforeseeable Physical Conditions

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions which he considers to have been unforeseeable, the Contractor shall give notice to the Project Coordinator as soon as practicable.

This notice shall describe the physical conditions, so that they can be inspected by the Project Coordinator, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Project Coordinator may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

If and to the extent that the Contractor encounters physical conditions which are unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor 's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving such notice and inspecting and/or investigating these physical conditions, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Project Coordinator may also review whether other physical conditions in similar parts of the Works (if any) were more favorable than could reasonably have been foreseen when the Contractor submitted the Tender. If and to the extent that these more favorable conditions were encountered, the Project Coordinator may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Project Coordinator may take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which may be made available by the Contractor, but shall not be bound by any such evidence.


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4.13 Rights of Way and Facilities

The Employer shall be responsible for the provision of access to and possession of the Site and for the rights of way (including special and/or temporary rights of way) which are necessary during the execution of the Works. The contractor will need to share costs of removal of encroachments, replacement of fences and installation of entrances to private properties as well as reasonable relocation of utilities.

In the event that resolving the right-of-way issue would take more time and may cause delay in the execution of the project, the Contractor has the right to submit a written letter to the Employer requesting the time extension of the project and to seek entitlement for such extension.

The Contractor shall obtain, at his risk and cost, any additional rights of way or facilities outside the Site, which he may require for the purposes of the Works.

4.14 Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

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4.15 Access Route

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

- (a) the Contractor shall (as between the Parties) be responsible for any maintenance which may be required for his use of access routes;
- (b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;
- (c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route,
- (d) the Employer does not guarantee the suitability or availability of particular access routes, and
- (e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.16 Transport of Goods

Unless otherwise stated in the Particular Conditions:


- (a) the Contractor shall give the Project Coordinator not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;
- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

4.17 Contractor 's Equipment

The Contractor shall be responsible for all Contractor 's Equipment. When brought on to the Site, Contractor 's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor 's Equipment without the consent of the Project Coordinator. However, consent shall not be required for vehicles transporting Goods or Contractor 's Personnel off Site.

4.18 Protection of the Environment

Contractor will have to be compliant with the Environmental Compliance plan which was approved by the DOE/ Government of Belize. This shall be annex to the Contract. The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor 's activities shall not exceed the values indicated in the Employer's Requirements and shall not exceed the values prescribed by applicable Laws.


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In the transportation of material along the public access and main roadways, the Contractor shall ensure that the mode of transportation is adequate such that spillages do not occur.

Heavy equipment is to be transported on appropriate haulage equipment such that no damage is to be done to public roadways. Failure to comply shall result in the Contractor remedying any damage at their cost.

Contractor shall ensure that dust from the Works is minimized. Appropriate measures must be employed to control dust levels.

Project Coordinator may issue a warning in writing to the Contractor if dust nuisance is not appropriately controlled. In the event of subsequent dust nuisance, the Contractor will be liable to the cost due to damages and be responsible, at no cost to the Employer, for any cleaning of property that the Project Coordinator deems to have been adversely affected by dust.

4.19 Electricity, Water and Gas

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Employer's Requirements. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or

determined by the Project Coordinator in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

4.20 Employers Equipment

- (a) The Employer shall be responsible for the Employer's equipment, and
- (b) The Contractor shall be responsible for each item of Employer's equipment whilst any of the contractor's personnel is operating it, driving it, directing it or in possession or control of it.


4.21 Progress Reports

Unless otherwise stated in the Particular Conditions, monthly progress reports shall be prepared by the Contractor and submitted to the Project Coordinator in six (6) copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection, testing, commissioning and trial operation;
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
 - (i) commencement of manufacture,
 - (ii) Contractor's inspections,
 - (iv) tests, and
 - (iv) shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of Variations, notices given under Sub-Clause 2.5 [Employer's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.


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4.22 Security of the Site

Unless otherwise stated in the Particular Conditions:


- (a) the Contractor shall be responsible for keeping unauthorized persons off the Site,
and
- (b) authorized persons shall be limited to the Contractor 's Personnel and the Employer's Personnel;
and to any other personnel notified to the Contractor, by the Employer or the Project
Coordinator, as authorized personnel of the Employer's other Contractors on the Site.
- c) The general public shall at all times be given reasonable access on the Corozal – Sarteneja Road
to carry out their daily activities.

4.23 Contractor's Operations on Site

The Contractor shall confine his operations to the Site, and to any additional areas which may be obtained by the Contractor and agreed by the Project Coordinator as working areas. The Contractor shall take all necessary precautions to keep Contractor 's Equipment and Contractor 's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction and shall store or dispose of any Contractor 's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor 's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.


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4.24 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor 's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Project Coordinator, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor 's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this further notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

5 Design

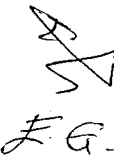
5.1 General Design Obligations

The Contractor shall carry out and be responsible for the design of the Works. Design shall be prepared by qualified and suitably experienced Consultants who comply with the criteria (if any) stated in the Specifications. Unless otherwise stated in the Contract, the Contractor shall submit to the Project Coordinator for consent the name and particulars of each proposed Consultant and design Sub-consultant.

The Contractor warrants that he, his Consultants and design Sub-consultants have the qualification, requisite experience and capability necessary to complete the design of the works. The Contractor undertakes that the Consultants shall be available to attend discussions with the Project Coordinator at all reasonable times, until the expiry date of the relevant Defects Notification Period.

Upon receiving notice under Sub-Clause 8.1 [Commencement of Works], the Contractor shall scrutinize the Employer's Requirements (including design criteria and calculations, if any) and the items of reference mentioned in Sub-Clause 4.7 [Setting Out]. Within the period stated in the Contract Data, calculated from the Commencement Date, the Contractor shall give notice to the Project Coordinator of any error, fault or other defect found in the Specifications or these items of reference.

After receiving this notice, the Project Coordinator shall determine whether Clause 13 [Variations and Adjustments] shall be applied and shall give notice to the Contractor accordingly. If and to the extent that (taking account of cost and time) an experienced Contractor exercising due care would have discovered the error, fault or other defect when examining the Site and the Employer's Requirements before submitting the Proposal, the Time for Completion shall not be extended and the Contract Price shall not be adjusted.

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5.2 Contractor's Documents

The Contractor's Documents shall comprise the technical documents indicated in the Specifications, documents required to satisfy all regulatory approvals, and the documents described in Sub-Clause 5.6 [As-Built Drawings /Documents] and Sub-Clause 5.7 [Operation and Maintenance Manuals]. Unless otherwise stated in the Employer's Requirements, the Contractor's Documents shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language].

The Contractor shall prepare all Contractor's Documents, and shall also prepare any other documents necessary to instruct the Contractor's Personnel. The Employer's Personnel shall have the right to inspect the preparation of all these documents, wherever they are being prepared.

If the Specifications describe the Contractor's Documents which are to be submitted to the Project Coordinator for review and/or for approval, they shall be submitted accordingly, together with a notice as described below. In the following provisions of this Sub-Clause, (i) "review period" means the period required by the Project Coordinator for review and (if so specified) for approval, and (ii) "Contractor's Documents" exclude any documents which are not specified as being required to be submitted for review and/or for approval.

Unless otherwise stated in the Specifications, each review period shall not exceed 21 days, calculated from the date on which the Project Coordinator receives a Contractor's Document and the Contractor's notice. This notice shall state that the Contractor's Document is considered ready, both

for review (and approval, if so specified) in accordance with this Sub-Clause and for use. The notice shall also state that the Contractor's Document complies with the Contract, or the extent to which it does not comply.

The Project Coordinator may, within the review period, give notice to the Contractor that a Contractor's Document fails (to the extent stated) to comply with the Contract. If a Contractor's Document so fails to comply, it shall be rectified, resubmitted and reviewed (and, if specified, approved) in accordance with this Sub-Clause, at the Contractor's cost.

For each part of the Works, and except to the extent that the prior approval or consent of the Project Coordinator shall have been obtained:

- (a) in the case of a Contractor's Document which has (as specified) been submitted for the Project Coordinator's approval:
 - (i) the Project Coordinator shall give notice to the Contractor that the Contractor's Document is approved, with or without comments, or that it fails (to the extent stated) to comply with the Contract;
 - (ii) execution of such part of the Works shall not commence until the Project Coordinator has approved the Contractor's Document; and
 - (iii) The contractor shall give the employer reasonable time to review the Final design Drawings which must meet the design criteria and approval of the MOW before the construction phase commences;
- (b) execution of such part of the Works shall not commence prior to the expiry of the review periods for all the Contractor's Documents which are relevant to its design and execution;
- (c) execution of such part of the Works shall be in accordance with these reviewed (and, if specified, approved) Contractor's Documents; and
- (d) if the Contractor wishes to modify any design or document which has previously been submitted for review (and, if specified, approval), the Contractor shall immediately give notice to the Project Coordinator. Thereafter, the Contractor shall submit revised documents to the Project Coordinator in accordance with the above procedure.

If the Project Coordinator instructs that further Contractor's Documents are required, the Contractor shall prepare them promptly.

Any such approval or consent, or any review (under this Sub-Clause or otherwise), shall not relieve the Contractor from any obligation or responsibility.

5.3 Contractor's Undertaking

The Contractor undertakes that the design, the Contractor's Documents, the execution and the completed Works will be in accordance with:

- (a) the Laws in the Country that are related to the Contract, and
- (b) the documents forming the Contract, as altered or modified by Variations.

5.4 Technical Standards and Regulations

The design, the Contractor's Documents, the execution and the completed Works shall comply with the Country's technical standards, building, construction and environmental Laws, Laws applicable

to the product being produced from the Works, and other standards, applicable to the Works, or defined by the applicable Laws.

All these Laws shall, in respect of the Works and each Section, be those prevailing when the Works or Section are taken over by the Employer under Clause 10 [Employer's Taking Over]. References in the Contract to published standards shall be understood to be references to the edition applicable on the Base Date, unless stated otherwise.

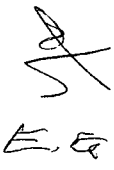
If changed or new applicable standards come into force in the Country after the Base Date, the Contractor shall give notice to the Project Coordinator and (if appropriate) submit proposals for compliance. In the event that:

- (a) the Project Coordinator determines that compliance is required, and
- (b) the proposals for compliance constitute a variation, then the Project Coordinator shall initiate a Variation in accordance with Clause 13 [Variations and Adjustments].

5.5 As-Built Documents

The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed. These records shall be kept on the Site and shall be used exclusively for the purposes of this Sub-Clause. Two copies shall be supplied to the Project Coordinator prior to the commencement of the Tests on Completion.

In addition, the Contractor shall supply to the Project Coordinator as-built drawings of the Works, showing all Works as executed, and submit them to the Project Coordinator for review under Sub-Clause 5.2 [Contractor's Documents]. The Contractor shall obtain the consent of the Project Coordinator as to their size, the referencing system, and other relevant details.



Prior to the issue of any Taking-Over Certificate, the Contractor shall supply to the Project Coordinator the specified numbers and types of copies of the relevant as-built drawings, in accordance with the Employer's Requirements. The Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until the Project Coordinator has received these documents.

5.6 Design Error

If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's Documents, they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval under this Clause.

6 Staff and Labor

6.1 Engagement of Staff and Labor

The Contractor shall make the necessary arrangements for the engagement of all staff and labor, skilled and unskilled, local or otherwise, as may be required for the construction, completion and maintenance of the Works, by following the corresponding applicable Labour Laws in Belize, in accordance with the appropriate employment contract.

- (a) The Contractor shall use all diligence in arranging for a sufficient and suitable supply of such labor; but all such arrangements shall be in accordance with the general local usage and subject

to such regulations as Government may, from time to time, require to be observed. As far as possible, all labor, both skilled and unskilled, shall be engaged in Belize and more specifically the community and its environs where construction is being undertaken.

- (b) The Contractor shall recognize the freedom of his workpeople to be members of recognized trade unions.


6.2 Rates of Wages and Conditions of Labour

The Contractor shall pay rates or wages in accordance to the following:

- (a) that are not less than the rates of wages established under the Belize Labour Act, Chapter 297, revised edition 2011.
- (b) The rates of wages and conditions of labor established in the absence of or subsequent to any collective arrangement, under any arbitration award for work of the same character in the trade or industry, whether or not such award is binding on the Contractor.
- (c) The minimum rates of wages established by any Law .
- (d) Such rates of wages as are paid by the Government of Belize or work of the same character in the trade or industry, in the absence of any collective agreement, arbitration award or provision of law.

- 6.2.1 The Contractor or his sub-contractor shall post notices in conspicuous places at the establishments and work-places concerned, informing the workers of the rates of pay and other conditions of work.

- a. In the event of any question arising as to whether the requirements for the relevant Clauses of this Contract are being observed, that question shall, if not otherwise disposed of, be referred to the Head of the Labor Department.


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- b. In the event of no settlement being reached, the difference shall be referred to arbitration under any statute that may for the time being provide arbitration and enquiry machinery for the settlement of trade disputes.

- c. Any Contractor or Sub-contractor who is found to be in breached of the relevant Clauses of this Contract, shall cease to be approved as a Contractor or Sub-contractor for such period as the Government of Belize may decide.

- 6.2.2 The Contractor or his sub-contractor shall keep proper wages and time books and, in the event of work being paid for by day work, work sheets shall be kept showing wages paid to the time and/or the amount of work performed by workmen in and about the execution of the Contract.

- 6.2.3 The Contractor shall, before commencing work under the Contract, notify the Project Coordinator of the following:

- 1. the number and categories of workers he proposes to employ; and
 - 2. the date of commencement of the work.

- 6.2.4 The Contractor shall be responsible for the observance of the obligations, duties and responsibilities concerning personnel contained in this Clause and elsewhere in the Contract.

6.3 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.

6.4 Labor Laws

The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

6.5 Working Hours

No work shall be carried out on the Site on locally recognized days of rest/ holidays , or outside the normal working hours stated in the Contract Data, being the normal work week 45 hours, anything beyond shall be compliant with the applicable Belize Labour Laws :

- (a) otherwise stated in the Contract,
- (b) the Project Coordinator gives consent, or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Coordinator.

6.6 Facilities for Staff and Labor

Except as otherwise stated in the Contract, the Contractor shall provide and maintain all necessary accommodations and welfare facilities for the Contractor's personnel in accordance with the Belize Labor Act, Chapter 297.

The Contractor will be required to adequately maintain its campsite facilities to a standard acceptable to the Employer.

6.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and ambulance service are available at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send to the Project Coordinator, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health,


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safety and welfare of persons, and damage to property, as the Project Coordinator may reasonably require.

The ESIA Update and ECP shall complement these subclauses which must be complied with by the Contractor

6.8 Contractor's Superintendence

Throughout the design and execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

The Contractor's authorized representatives shall be fluent in the English language and shall have a sufficient knowledge of English to receive written and verbal instructions from the Project Coordinator and to make such written and verbal reports as the Project Coordinator may, from time to time, require.

6.9 Contractor's Personnel

The Contractor's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Project Coordinator may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

- (a) persists in any misconduct or lack of care,
- (b) carries out duties incompetently or negligently,
- (c) fails to conform with any provisions of the Contract, or
- (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

If appropriate, the Contractor, shall then appoint (or cause to be appointed) a suitable replacement person who has similar or better qualifications and experience as the incumbent contractor's representative.

6.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Project Coordinator, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Project Coordinator, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

6.12 Foreign Personnel

As far as possible, and without detriment to the execution of the Works, all labor, both skilled and unskilled, shall be engaged in Belize. Notwithstanding the aforementioned, the Employer shall permit the Contractor to bring into Belize and obtain resident visas and work permits for foreign personnel for such time as may be required for the execution of the Works.

6.13 Alcoholic Liquor or Drugs


The Contractor shall not permit the use of Alcoholic Liquor or Drugs by any of his staff or any sub-Contractor s employed under this Contract

6.14 Arms and Ammunition

The Contractor shall not give, barter or otherwise dispose of to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid.

6.15 Festivals and Religious Customs

The Contractor shall in all dealings with his staff and labour have due regard to all recognized festivals, days of rest and religious or other customs.


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6.16 Epidemics

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for the purpose of dealing with and overcoming same.

6.17 Statutory Regulations

In respect of the engagement, employment, transport, paying, feeding, housing and working conditions of labour and of all other matters connected therewith the Contractor shall at all times during the continuance of the Contract conform in all respects with and carry out all obligations imposed on him by the provisions and requirements of the Labour Code or any other Government Ordinance or other Law or Regulation or By-Law of any local or other duly constituted authority which may be applicable including any such law, regulation or order passed or made or coming into force during the period of the Contract.

The Contractor shall employ local labour as far as possible on the Works and shall train such local labour where necessary for the purpose of the Works. Preference shall be given for employment to permanent residents of Belize.

In the event that the Contractor wishes to employ non-local labour or employees, this shall be

subject to approval of the Employer. Such approval shall not be unreasonably withheld.

The Contractor shall make all necessary arrangements for obtaining work permits for his expatriate employees and shall ensure that any registration, residence and subsequent departure are complied with. In such respects, the Contractor may submit applications to the Employer giving full details of nationality, qualification, purpose and duration of stay of the employees following which, subject to his agreement, the Employer will provide the Contractor with notices to the effect that the respective employees are required for the Contract.

6.18 Measures against Insect Nuisance


The Contractor shall take all precautions necessary to reduce the dangers to health and general nuisance occasioned by mosquitoes and other pests. He shall comply with all the regulations of the Medical Authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticides all buildings erected on the Site.

7 Plant, Materials and Workmanship

7.1 Manner of Execution

The Contractor shall carry out the manufacture of Plant, the production and manufacture of Materials, and all other execution of the Works:

- (a) in the manner (if any) specified in the Contract,
- (b) in a proper workmanlike and careful manner, in accordance with recognized good practice, and
- (c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.


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7.2 Samples

The Contractor shall submit the following samples of Materials, and relevant information, to the Project Coordinator for review in accordance with the procedures for Contractor's Documents described in Sub-Clause 5.2 [Contractor's Documents]:

- (a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and
- (b) additional samples instructed by the Project Coordinator as a Variation.

Each sample shall be labelled as to origin and intended use in the Works.

7.3 Inspection

The Employer's Personnel shall at all reasonable times:

- (a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and
- (b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Project Coordinator whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Project Coordinator shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Project Coordinator does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Project Coordinator, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

7.4 Testing

This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labor, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Project Coordinator, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Project Coordinator may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests.

If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Project Coordinator shall give the Contractor not less than 24 hours' notice of the Project Coordinator's intention to attend the tests. If the Project Coordinator does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Project Coordinator, and the tests shall then be deemed to have been made in the Project Coordinator's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Project Coordinator duly certified reports of the tests. When the specified tests have been passed, the Project Coordinator shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Project Coordinator has not attended the tests, he shall be deemed to have accepted the readings as accurate.

7.5 Rejection

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the Contract, the Project Coordinator may reject the Plant, Materials, design or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

If the Project Coordinator requires this Plant, Materials, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer.

7.6 Remedial Work

Notwithstanding any previous test or certification, the Project Coordinator may instruct the Contractor to:

- (a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,
- (b) remove and re-execute any other work which is not in accordance with the Contract, and
- (c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer all costs arising from this failure.

7.7 Costs for the Purpose of Clause 15.2

In the event of the Employer entering into any agreement for the hire of Contractor's Equipment all sums properly paid by the Employer under the provisions of any such agreement and all costs incurred by him (including stamp duties) in entering into such agreement shall be deemed, for the purposes of clause 15.2, to be part of the cost of executing and completing the Works and the remedying of any defects.

7.8 Immovability of Construction Equipment

No construction equipment, temporary works or materials or any part thereof (except hired equipment) shall be removed from the site without the written consent of the Employer, which consent shall not be unreasonably withheld where the same is no longer immediately required for the purpose of completion of the Works but the Employer shall permit the Contractor the exclusive use of all such constructional plant, temporary works and materials in and for the completion of the Works until the occurrence of any event, which gives the Employer the right to exclude the Contractor from the completion of the Works.

7.9 Revesting and Removal of Plant

Upon removal of any construction equipment, temporary works and materials as have been deemed to have become the property of the Employer with consent as aforesaid the property therein shall be deemed to revest in the Contractor and upon completion of the Works, the property in the remainder of such constructional plant, temporary works and materials as aforesaid shall be subject to the provisions of Clause 15.2 hereof deemed to revest in the Contractor who shall remove the same together with any essential hired plant and hire purchase plant. If the Contractor shall fail to remove constructional plant, temporary work or materials as aforesaid or any essential hired plant, hire purchase plant or hired plant within such reasonable time after completion of the Works as may be allowed by the Project Coordinator then the Employer may:

- i) sell any such constructional plant, temporary works and materials as aforesaid, and
- ii) return at the Contractor's expense to the person, firm or company from which any essential hired plant or any hire purchase plant was held by the Contractor.

And after deducting from any proceeds of sale the costs, charges and expenses of and in connection with such sale and of and in connection with return as aforesaid shall pay the balance (if any) to the Contractor but to the extent that the proceeds of any sales are insufficient to meet all such costs, charges and expenses, the excess shall be a debt due from the Contractor to the Employer and shall be deductible or recoverable by the Employer accordingly as aforesaid.

8 Commencement, Delays and Suspension

8.1 Commencement of Works

The Project Coordinator shall give the Contractor no less than 7 days' notice of the commencement date, having fulfilled the precedent conditions for commencement. The commencement date shall be within 28 days after the signing of the contract.

The Contractor's commencement of the works should be subject to the satisfaction of the following:

- (a) The Employer's fulfillment of the stipulation under Sub-Clause 2.1 of these Specifications.
- (b) Receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 (Advance Payment)

Day one of the Contractor's Programme pursuant to Sub-Clause 8.3 [*Programme*] and for each Section of the Works shall be made to coincide with the Contract Commencement Date.

8.2 Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

- (a) achieving the passing of the Tests on Completion, and
- (b) completing all work which is stated in the Contract as being required for the Works or Section to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

8.3 Programme

The Contractor shall submit a detailed time programme to the Project Coordinator within 28 days after receiving the notice under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

- (a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design, Contractor's Documents, procurement, manufacture, inspection, delivery to Site, construction, erection, testing, commissioning and trial operation,
- (b) the periods for reviews under Sub-Clause 5.2 [Contractor's Documents] and for any other submissions, approvals and consents specified in the Employer's Requirements,
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
 - (i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
 - (ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.
- (e) The Contractor will not be permitted to commence before his programme is received by the Project Coordinator.

Unless the Project Coordinator, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Project Coordinator of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Project Coordinator may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

If, at any time, the Project Coordinator gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Project Coordinator in accordance with this Sub-Clause.

8.4 Extension of Time for Completion

The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]),
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these

Conditions, including the excess of period for reviews and for any other submissions, approvals and consent specified in the Contract.

- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other Contractors on the Site.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Project Coordinator in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Project Coordinator shall review previous determinations and may increase, but shall not decrease, the total extension of time.

8.5 Delays Caused by Authorities

If the following conditions apply, namely:

- (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) these authorities delay or disrupt the Contractor's work, and
- (c) the delay or disruption was Unforeseeable, then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

8.6 Rate of Progress

If, at any time:

- (a) actual progress is too slow to complete within the Time for Completion, and/or
- (b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],

other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Project Coordinator may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Project Coordinator notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 8.7 below.

8.7 Delay Damages

If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day


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which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.

These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

8.8 Suspension of Work

The Project Coordinator may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

The Project Coordinator may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

8.9 Consequences of Suspension

If the Contractor suffers delay and/or incurs Cost from complying with the Project Coordinator's instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

8.10 Payment for Plant and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension) of Plant and/or Materials which have not been delivered to Site, if:

- (a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than 28 days, and
- (b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Project Coordinator's instructions.

8.11 Prolonged Suspension

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days,

the Contractor may request the Project Coordinator's permission to proceed. If the Project Coordinator does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Project Coordinator, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.12 Resumption of Work

After the permission or instruction to proceed is given, the Contractor and the Project Coordinator shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension.

8.13 Restriction of Night Work

Night work will only be permitted on any section of the Works, with the written approval of the Project Coordinator. If such permission is granted, the Conditions of Clause 8.14 shall apply.

8.14 Liability for Night Work

If night work is approved by the Project Coordinator in accordance with Clause 8.13, then all work at night shall be carried out without unreasonable disturbance. The Contractor shall indemnify the Employer from and against any liability for damages on account of noise or other disturbances created while or in carrying out the Works and from and against all claims, demands, proceedings, cost and expenses whatsoever in regard or in relation to such liability.

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9 Tests on Completion

9.1 Contractor's Obligations

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with Sub-Clause 5.6 [As-Built Documents] and

The Contractor shall give to the Project Coordinator not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out within 14 days after this date, on such day or days as the Project Coordinator shall instruct.

Unless otherwise stated in the Particular Conditions, the Tests on Completion shall be carried out in the following sequence:

- (a) pre-commissioning tests, which shall include the appropriate inspections and ("dry" or "cold") functional tests to demonstrate that each item of Plant can safely undertake the next stage, (b);
- (b) commissioning tests, which shall include the specified operational tests to demonstrate that the Works or Section can be operated safely and as specified, under all available operating conditions; and

- (c) trial operation, which shall demonstrate that the Works or Section perform reliably and in accordance with the Contract.

During trial operation, when the Works are operating under stable conditions, the Contractor shall give notice to the Project Coordinator that the Works are ready for any other Tests on Completion, including performance tests to demonstrate whether the Works conform with criteria specified in the Employer's Requirements and with the Schedule of Guarantees.

Trial operation shall not constitute a taking-over under Clause 10 [Employer's Taking Over]. Unless otherwise stated in the Particular Conditions, any product produced by the Works during trial operation shall be the property of the Employer.

In considering the results of the Tests on Completion, the Project Coordinator shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed each of the Tests on Completion described in sub-paragraph (a), (b) or (c), the Contractor shall submit a certified report of the results of these Tests to the Project Coordinator.

9.2 Delayed Tests

If the Tests on Completion are being unduly delayed by the Employer, Sub-Clause 7.4 [Testing] (fifth paragraph) and/or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Project Coordinator may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Project Coordinator.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

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9.3 Retesting

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Project Coordinator or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

9.4 Failure to Pass Tests on Completion

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Project Coordinator shall be entitled to:

- (a) order further repetition of Tests on Completion under Sub-Clause 9.3;
- (b) if the failure deprives the Employer of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [Failure to Remedy Defects]; or

- (c) issue a Taking-Over Certificate, if the Employer so requests.

In the event of sub-paragraph (c), the Contractor shall then proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations].

10 Employer's Taking Over

10.1 Taking Over of the Works and Sections

Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Project Coordinator for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

The Project Coordinator shall, within 28 days after receiving the Contractor's application:

- (a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or
- (b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Project Coordinator fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

The Project Coordinator may, at the sole discretion of the Employer, issue a Taking-Over Certificate for any part of the Permanent Works.

The Employer shall not use any part of the Works (other than as a temporary measure which is either

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specified in the Contract or agreed by both Parties) unless and until the Project Coordinator has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

- (a) the part which is used shall be deemed to have been taken over as from the date on which it is used,
- (b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and
- (c) if requested by the Contractor, the Project Coordinator shall issue a Taking-Over Certificate for this part.

After the Project Coordinator has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.

If the Contractor incurs Cost as a result of the Employer taking over and/or using a part of the Works, other than such use as is specified in the Contract or agreed by the Contractor, the Contractor shall (i) give notice to the Project Coordinator and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost plus reasonable profit, which shall be included in the Contract Price. After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost and profit.

If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages], and shall not affect the maximum amount of these damages.

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10.3 Interference with Tests on Completion

If the Contractor is prevented, for more than 14 days, from carrying out the Tests on Completion by a cause for which the Employer is responsible, the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

The Project Coordinator shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Project Coordinator shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause

8.4 [Extension of Time for Completion], and

- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price. After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

10.4 Surfaces Requiring Reinstatement

Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section or part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11 Defects Liability

11.1 Completion of Outstanding Work and Remedying Defects

In order that the Works and Contractor 's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:

- (a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Project Coordinator, and
- (b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may be).

If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.

11.2 Cost of Remedying Defects

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

- (a) the design of the Works, other than a part of the design for which the Employer is responsible (if any),
- (b) Plant, Materials or workmanship not being in accordance with the Contract,
- (c) improper operation or maintenance which was attributable to matters for which the Contractor is responsible (under Sub-Clauses 5.5 to 5.7 or otherwise), or
- (d) failure by the Contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Employer, and Sub-Clause 13.3 [Variation Procedure] shall apply.

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11.3 Extension of Defects Notification Period

The Employer shall be entitled subject to Sub-Clause 2.5 [Employer's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However, a Defects Notification Period shall not be extended by more than two years.

If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.

11.4 Failure to Remedy Defects

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Employer may (at his option):

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;
- (b) require the Project Coordinator to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or
- (c) if the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use.

Without prejudice to any other rights, under the Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5 Removal of Defective Work

If the defect or damage cannot be remedied expeditiously on the Site and the Employer gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged.

11.6 Further Tests

If the work of remedying of any defect or damage may affect the performance of the Works, the Project Coordinator may require the repetition of any of the tests described in the Contract, including Tests on Completion and/or Tests after Completion. The requirement shall be made by notice within 28 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

11.7 Right of Access

Until the Performance Certificate has been issued, the Contractor shall have the right of access to all parts of the Works and to records of the operation and performance of the Works, except as may be inconsistent with the Employer's reasonable security restrictions.

11.8 Contractor to Search

The Contractor shall, if required by the Project Coordinator, search for the cause of any defect, under the direction of the Project Coordinator. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search plus reasonable profit shall be agreed or determined by the Project Coordinator in accordance with Sub-Clause 3.5 [Determinations] and shall be included in the Contract Price.

11.9 Performance Certificate

Performance of the Contractor's obligations shall not be considered to have been completed until the Project Coordinator has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

The Project Coordinator shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects. A copy of the Performance Certificate shall be issued to the Employer.

Only the Performance Certificate shall be deemed to constitute acceptance of the Works.

11.10 Unfulfilled Obligations

After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

11.11 Clearance of Site

Upon receiving the Performance Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

If all these items have not been removed within 28 days after the Employer receives a copy of the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

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12 Measurement and Evaluation

12.1 The Works to be measured and valued for payment in accordance with this clause.

Whenever the Project Coordinator Requires any parts of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall

- a) promptly either attend or send another qualified representing to assist the Project Coordinator in making the measurement and
- b) supply any particulars requested by the Employer

If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Project Coordinator shall be accepted as accurate.

Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Project Coordinator. The Contractor shall, as when requested, attend to examine and agree the records with the Project Coordinator, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

If the Contractor examines and disagrees the records, and/or does not sign them as agreed, then the Contractor shall give Notice to the Project Coordinator of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Project Coordinator shall review the records and either confirm or vary them. If the Contractor does not so give notice to the Project Coordinator within 14 days after being requested to examine the records, they shall be accepted as accurate.


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12.2 Method of Measurement

Except as otherwise stated in the contract and notwithstanding local practice:

- a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and
- b) the Method of measurement shall be in accordance with the Bills of quantities or other applicable schedules.

12.3 Evaluation

Except as otherwise stated in the contract, the Project Coordinator shall proceed in accordance with subclause 3.5 (determinations) to agree or determine the contract price by evaluating each item of work, applying the measurement agreed or determine in accordance with the above subclauses 12.12 and 12.2 and the appropriate rates or price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the contract or, if there is such item, specify for similar work. However, a new rate or price shall be appropriate for an item of work if;

- (a) (i) the measure quality of the item is changed by more than 10% from the quantity of

- this item in the Bill of Quantities or other schedule,
- (ii) this change in quantity multiplied by such specified rate for this item exceeds 0.01% of the accepted contract amount,
 - (iii) this change in quantity directly changes the cost per unit quantity of this item by more than 1%, and
 - (iv) This item is not specified in the contract as a open "fixed rate item" ;

Or

- b)(i) the Work is instructed under clause 13 (Variations and Adjustments).
- (ii) no rate or price is specified in the contract for this item, and
- (iii) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the contract.

Each new rate or price shall be derived from any relevant rates or prices in the contract, with reasonable adjustments to take account of the matters described in sub paragraph (a) and/or (b), as applicable. If no rates or price are relevant for the derivation of a new rate or price, it shall be derived from the reasonable cost of executing the work, together with reasonable profit, taking account of any other relevant matters.

Until such time as an appropriate rate or price is agreed or determine, the Project Coordinator shall determine a provisional rate or price for the purposes of interim payment certificates.

12.4 Omissions

Whenever the omission of any work forms part (or all) of a variation, the value of which has not been agreed, if;

- (a) the contractor will incur (or has incurred) cost which, if the works has not been omitted, would have been deemed to be recovered by a sum forming part of the accepted contract amount;
- (b) the omission of the Work will result (or has resulted) in this sum not forming part of the contract price; and
- (c) discussed is not deemed to be included in the evaluation of any substituted work;

Then the Contractor shall give Notice to the Project Coordinator accordingly, with supporting particulars. Upon receiving this Notice, the Project Coordinator shall proceed in accordance with sub clause 3.5 (determinations) to agree or determine this cost, which shall be included in the contract price.

13 Variations and Adjustments

13.1 Right to Vary

Variations may be initiated by the Project Coordinator at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal. A Variation shall not comprise the omission of any work which is to be carried out by others.


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The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Project Coordinator stating (with supporting particulars) that (i) the Contractor cannot readily obtain the Goods required for the Variation, (ii) it will reduce the safety or suitability of the Works, or (iii) it will have an adverse impact on the achievement of the Schedule of Guarantees. Upon receiving this notice, the Project Coordinator shall cancel, confirm or vary the instruction.

13.2 Value Project Engineering

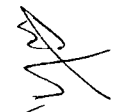
The Contractor may, at any time, submit to the Project Coordinator a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Employer of the completed Works, or (iv) otherwise be of benefit to the Employer.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].

13.3 Variation Procedure

If the Project Coordinator requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

- (a) a description of the proposed design and/or work to be performed and a programme for its execution,
- (b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and
- (c) the Contractor's proposal for adjustment to the Contract Price.


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The Project Coordinator shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Project Coordinator to the Contractor, who shall acknowledge receipt.

Upon instructing or approving a Variation, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine adjustments to the Contract Price and the Schedule of Payments. These adjustments shall include reasonable profit, and shall take account of the Contractor's submissions under Sub-Clause 13.2 [Value Engineering] if applicable.

13.4 Provisional Sums

Each Provisional Sum shall only be used, in whole or in part, in accordance with the Project Coordinator's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Project Coordinator shall have instructed. For each Provisional Sum, the Project Coordinator may instruct:

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or
- (b) Plant, Materials or services to be purchased by the Contractor, for which there shall be included in the Contract Price:
 - (i) the actual amounts paid (or due to be paid) by the Contractor, and
 - (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Contract Data shall be applied

The Contractor shall, when required by the Project Coordinator, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

Where a provisional or contingency sum has been included in the Bill of Quantities, no claim by the Contractor for loss of overhead charges and profit, will be admitted on the ground that such sum has not been expended in whole or in part.

13.5 Daywork

For work of a minor or incidental nature, the Project Coordinator may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the daywork schedule included in the Contract, and the following procedure shall apply. If a daywork schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the Contractor shall submit quotations to the Project Coordinator. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.


Except for any items for which the daywork schedule specifies that payment is not due, the Contractor shall deliver each day to the Project Coordinator accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

- (a) the names, occupations and time of Contractor 's Personnel,
- (b) the identification, type and time of Contractor 's Equipment and Temporary Works, and
- (c) the quantities and types of Plant and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Project Coordinator and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Project Coordinator, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

13.6 Adjustments for Changes in Legislation

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the


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performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

13.7 Adjustments for Changes in Cost

In this Sub-Clause, "table of adjustment data" means the completed table of adjustment data included in the Contract Data. If there is no such table of adjustment data, this Sub-Clause shall not apply.

If this Sub-Clause applies, the amounts payable to the Contractor shall be adjusted for rises or falls in the cost of labor, Goods and other inputs to the Works, by the addition or deduction of the amounts determined by the formulae prescribed in this Sub-Clause. To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this or other Clauses, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in costs.

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

$$P_n = a + b \frac{L_n}{L_0} + c \frac{E_n}{E_0} + d \frac{M_n}{M_0} + \dots$$


where:

"P_n" is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period "n", this period being a month unless otherwise stated in the Contract Data;

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;

"b", "c", "d", ... are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labor, equipment and materials;

"L_n", "E_n", "M_n", ... are the current cost indices or reference prices for period "n", expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and


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"Lo", "Eo", "Mo", ... are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.

The cost indices or reference prices stated in the table of adjustment data shall be used. If their source is in doubt, it shall be determined by the Project Coordinator. For this purpose, reference shall be made to the values of the indices at stated dates (quoted in the fourth and fifth columns respectively of the table) for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.

In cases where the "currency of index" (stated in the table) is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of the Country, of this relevant currency on the above date for which the index is required to be applicable.

Until such time as each current cost index is available, the Project Coordinator shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.

If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price: whichever is more favorable to the Employer.

The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced or inapplicable, as a result of Variations.


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14 Contract Price and Payment

14.1 The Contract Price

(a) The Contract price comprises:

- I. Design Cost - US\$1.5M (Tax free)
- II. Construction Cost - US\$45.35M (Tax free)
- III. Supervision Cost - US\$3.15 (Tax free) for a period of 54 months;

(b) the Contractor shall be exempted from payment of:

- (i) Company Tax or withholding tax on the profits
- (ii) Fees in relation to any licenses, permits, approvals which are required for the Works.
- (iii) GST on imported or local purchases of materials supplies, subcontracted works and services.
- (iv) Customs Duties, taxes and service charges on any Plant, material and all other things, expressly imported into Belize by the Contractor for the Works or the Temporary Works, provided that such Plant, materials all other things are:

- Completely incorporated or exclusively used in the Works,
- Completely consumed by the Works or by the temporary works, and
- Provided that such plant and other things shall not be sold in Belize or not used for purposes other than the works or the temporary works; exported from Belize within one month of the Project Coordinator's final certificate and if not exported they will be subject to assessment by customs and payment of custom duty, value added tax and service charge.

[If payment for any part of the Works is to be made on the basis of measurement, that part of the Works must be defined in the Contract and the following wording added]

"The Project Coordinator shall agree or determine the value of those parts of the Works which are to be measured, in accordance with Sub-Clause 3.5 [*Determinations*]. Measurement shall be made of the net actual quantities of those parts.

"Whenever the Project Coordinator requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's representative, who shall:

(a) promptly either attend or send another qualified representative to assist the Project Coordinator in making the measurement, and

(b) supply the particulars requested by the Project Coordinator

"If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Project Coordinator shall be accepted as accurate.

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"Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured by records, they shall be prepared by the Project Coordinator. The Contractor shall, as and when requested, attend to examine and agree the records with the Project Coordinator, and shall sign the same when agreed. If the Contractor does not attend to examine and agree these records, they shall be accepted as accurate."

"If the Contractor examines and disagrees with the records, and/or does not sign them as agreed, then the Contractor shall notify the Project Coordinator of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Project Coordinator shall review the records and either confirm or vary them. If the Contractor does not so notify the Project Coordinator within 14 days after being requested to examine the records, they shall be accepted as accurate."

(c) any quantities which may be set out in Bill of Quantities or other schedule are estimated quantities and are not to be taken as the actual and correct quantities:

1. of the Works which the Contractor is required to execute, or
2. for the purposes of Clause 12[Measurement and Evaluation]; and

(d) the Contractor shall submit to the Project Coordinator, within 28 days after the Commencement Date, a proposed breakdown of each lump sum price in the schedules. The Project Coordinator may take account of the breakdown when preparing Payment Certificates but shall not be bound by it.

14.2 Advance Payment

The Employer shall make an advance payment, loan for mobilization and design, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of installments (if more than one), and the applicable currencies and proportions, shall be as stated in the Contract Data.

Unless and until the Employer receives this guarantee, or if the total advance payment is not stated in the Contract Data, this Sub-Clause shall not apply.

The Project Coordinator shall deliver to the Employer and the Contractor an interim payment certificate for the amount equivalent to 25% of the Accepted Contract Amount, after receiving a statement (under Sub-Clause 14.3 [application for interim payment certificate] and guarantee from the Contractor. The guarantee shall be in the form of a Guarantee Letter for the Repayment of the Lump Sum Advance Amount, which shall be provided by his parent company, Overseas Investment & Development Corp. (OIDC). Timing for payment shall be within 43 days after the execution of the Guarantee.

The Contractor shall ensure that the guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

Unless stated otherwise in the, the advance payment shall be repaid through percentage deductions from the interim payments certified by the Project Coordinator in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:

(a) deductions shall commence in the next Interim Payment Certificate following that in which the total of all interim payments (excluding the advance payment and deductions and repayments of retention) certified to the Contractor has reached the percentage of the Accepted Contract Amount stipulated in the less Provisional Sums; and

(b) deductions shall be made at the amortization rate stated in the of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time that the advance payment shall be completely repaid prior to the time when the percentage of the Accepted Contract Amount less Provisional Sums stipulated in the Appendix to Bid has been certified for payment.”

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If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Employer], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

14.3 Application for Interim Payment Certificates

The Contractor shall submit a Statement in six copies to the Project Coordinator after the end of the period of payment stated in the Contract (if not stated, after the end of each month), in a form approved by the Project Coordinator, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the relevant report on progress in accordance with Sub-Clause 4.21 [Progress Reports].

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

- (a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);
- (b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];
- (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Contract Data to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Contract Data
- (d) any amounts to be added and deducted for the advance payment and repayments in accordance with Sub-Clause 14.2 [Advance Payment];
- (e) any amounts to be added and deducted for Plant and Materials in accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];
- (f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and in the case of termination under Clause 15 [Termination by Employer] or Sub-Clause 19.6 [Optional Termination, Payment and Release].
- (g) the deduction of amounts certified in all previous Payment Certificates.


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14.4 Schedule of Payments

If the Contract includes a Schedule of Payments specifying the instalments in which the Contract Price will be paid, then, unless otherwise stated in this Schedule:

- (a) the instalments quoted in the Schedule of Payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Sub-Clause 14.3 [Application for Interim Payment Certificates];

- (b) Sub-Clause 14.4 [Plant and Materials intended for the Works] shall not apply; and
- (c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which the Schedule of Payments was based, then the Project Coordinator may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less than that on which the instalments were previously based.

If the Contract does not include a Schedule of Payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

14.5 Plant and Materials intended for the Works

If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3, (i) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and (ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].

If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Contract Data, this Sub-Clause shall not apply. (List shall be provided by the Contractor)

The Project Coordinator shall determine and certify each addition if the following conditions are satisfied:

(a) the Contractor has:

- (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
- (ii) submitted a Statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory and either:


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(b) the relevant Plant and Materials:

- (i) are those listed in the Contract Data to for payment when placed with order and shipped,
- (ii) have been placed with Purchase Order and shipped to the Country, en route to the Site, in accordance with the Contract;
- (iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Project Coordinator together with evidence of payment of freight and insurance and any other documents reasonably required; and

the amount to be certified shall be the equivalent to Fifty Per Cent (50%) of the total cost of the Plant and Material, based on the documents mentioned herein; and are those listed in the Contract Data for payment when delivered to the Site, and

- (i) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

The amount to be certified for Sub-item (c) shall be the equivalent to Eighty Per Cent (80%) of the actual cost of the Plant and Materials (including the delivery to Site), based on the documents submitted in this Sub-Clause.

The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

14.6 Issue of Interim Payment Certificates

No amount will be certified or paid until the Employer has received and approved the Guarantee Letter. Thereafter, the Project Coordinator shall, within 21 days after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificate which shall state the amount which the Project Coordinator fairly determines to be due, with supporting particulars.

However, prior to issuing the Taking-Over Certificate for the Works, the Project Coordinator shall not be bound to issue an Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Contract Data. In this event, the Project Coordinator shall give notice to the Contractor accordingly.

An Interim Payment Certificate shall not be withheld for any other reason, although:

- (a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- (b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Project Coordinator, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Project Coordinator may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Project Coordinator's acceptance, approval, consent or satisfaction.

14.7 Payment

The Employer shall pay to the Contractor:

- (a) the advance payment in accordance with Sub-clause 14.2;
- (b) The Payment of amount certified in each interim certificate will be in accordance with the schedule set out in the **Finance Agreement**, and
- (c) The **PAYMENT AMOUNT** shall only be due and payable if all interim monthly certificates have been prepared and issued by the Employer's Representative and accepted by the Employer.

14.8 Payment of Retention Money

When the Taking-Over Certificate has been issued for the Works, and the Works have passed all

specified tests (including the Tests after Completion, if any), the first half of the Retention Money shall be certified by the Project Coordinator for payment to the Contractor . If a Taking-Over Certificate is issued for a Section, the relevant percentage of the first half of the Retention Money shall be certified and paid when the Section passes all tests.

Promptly after the latest of the expiry dates of the Defects Notification Periods, the outstanding balance of the Retention Money shall be certified by the Project Coordinator for payment to the Contractor . If a Taking-Over Certificate was issued for a Section, the relevant percentage of the second half of the Retention Money shall be certified and paid promptly after the expiry date of the Defects Notification Period for the Section.

However, if any work remains to be executed under Clause 11 [Defects Liability] or Clause 12 [Tests after Completion], the Project Coordinator shall be entitled to withhold certification of the estimated cost of this work until it has been executed.

14.9 Statement at Completion

Within 60 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Project Coordinator six (6) copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates], showing:

- (a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,
- (b) any further sums which the Contractor considers to be due, and
- (c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.


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The Project Coordinator shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

14.10 Application for Final Payment Certificate

Within 43 days after receiving the Performance Certificate, the Contractor shall submit, to the Project Coordinator, three copies of a draft final statement with supporting documents showing in detail in a form approved by the Project Coordinator:

- (a) the value of all work done in accordance with the Contract, and
- (b) any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Project Coordinator disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Project Coordinator may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Project Coordinator the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Project Coordinator and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Project Coordinator shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is

finally resolved under Sub-Clause 20.4 [Obtaining Dispute Adjudication Board's Decision] or Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Employer (with a copy to the Project Coordinator) a Final Statement.

14.11 Discharge


When submitting the Final Statement, the Contractor shall submit a written discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Guarantee Letter and the outstanding balance of this total, in which event the discharge shall be effective on such date.

14.12 Issue of Final Payment Certificate

Within 28 days after receiving the Final Statement and written discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Project Coordinator shall issue, to the Employer, the Final Payment Certificate which shall state:

- (a) the amount which is finally due, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance (if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.

If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Project Coordinator shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, the Project Coordinator shall issue the Final Payment Certificate for such amount as he fairly determines to be due.


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14.13 Cessation of Employer's Liability

The Employer shall not be liable to the Contractor for any matter or thing under or in connection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

- (a) in the Final Statement and also
- (b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].

However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer.

14.14 Currencies of Payment

Unless otherwise agreed, the payment under this Contract shall be made to the Contractor in United States Dollars (USD).

15 Termination by Employer

15.1 Notice to Correct

If the Contractor fails to carry out any obligation under the Contract, the Project Coordinator may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

15.2 Termination by Employer

The Employer shall be entitled to terminate the Contract if the Contractor:

- (a) Does not begin with the works within 15 calendar days after the Advance Payment reception as well as the Commencement Date Notification from the Engineer.
 - (b) Incurs in sub-execution during three (3) consecutive months, the Ministry of Works may proceed to the unilateral termination of the Contract, without any prejudice of making effective both, Advance Payment and Performance Guarantees.
 - (c) fails to comply with a notice under Sub-Clause 15.1 [Notice to Correct],
 - (d) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
 - (e) without reasonable excuse fails:
 - (i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
 - (ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 28 days after receiving
 - (f) subcontracts the whole of the Works or assigns the Contract without the required agreement,
 - (g) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or
 - (h) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
 - (i) for doing or forbearing to do any action in relation to the Contract, or
 - (ii) for showing or forbearing to show favor or disfavor to any person in relation to the Contract
- or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (e) or (f), the Employer may by notice terminate the Contract immediately.

The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.


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The Contractor shall then leave the Site and deliver any required Goods, all Contractor 's Documents, and other design documents made by or for him, to the Project Coordinator. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods, Contractor 's Documents and other design documents made by or on behalf of the Contractor.

The Employer shall then give notice that the Contractor 's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

15.3 Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Employer] has taken effect, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works, Goods and Contractor 's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract

15.4 Payment after Termination

After a notice of termination under Sub-Clause 15.2 [Termination by Employer] has taken effect, the Employer may:

- (a) proceed in accordance with Sub-Clause 2.5 [Employer's Claims],
- (b) withhold further payments to the Contractor until the costs of design, execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established, and/or
- (c) recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation at Date of Termination].

After recovering any such losses, damages and extra costs, the Employer shall pay any balance to the Contractor.

15.5 Employer's Entitlement to Termination

The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Guarantee Letter. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another Contractor.

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor 's Equipment] and shall be paid in accordance with Sub-Clause


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19.6 [Optional Termination, Payment and Release].

16 Suspension and Termination by Contractor

16.1 Contractor's Entitlement to Suspend Work

If the Project Coordinator fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or the Employer fails to comply with Sub-Clause 2.4 [Employer's Financial Arrangements] or Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].

If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

16.2 Termination by Contractor

The Contractor shall be entitled to terminate the Contract if:

- (a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work] in respect of a failure to comply with Sub-Clause 2.4 [Employer's Financial Arrangements],
- (b) the Project Coordinator fails, within 30 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
- (c) the Contractor does not receive the amount due under an Interim Payment Certificate within 14 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] of these Conditions, within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Employer's Claims]),
- (d) the Employer substantially fails to perform his obligations under the Contract,
- (e) the Employer fails to comply with Sub-Clause 1.6 [Contract Agreement] or Sub-Clause 1.7 [Assignment],


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- (f) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
- (g) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
- (h) The Contractor must notify and send a duly justified written request for the causes originating the temporary works suspension or the termination of the contract due to force majeure.

In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub-paragraph (f) or (g), the Contractor may by notice terminate the Contract immediately.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

16.3 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [Employer's Entitlement to Termination], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

- (a) cease all further work, except for such work as may have been instructed by the Project Coordinator for the protection of life or property or for the safety of the Works,
- (b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and
- (c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

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16.4 Payment on Termination

After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Employer shall promptly:

- (a) return the Guarantee Letter to the Contractor,
- (b) pay the Contractor in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release], and
- (c) pay to the Contractor the amount of any loss of profit or other loss or damage sustained by the Contractor as a result of this termination.

17 Risk and Responsibility

17.1 Indemnities

The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

- (a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and
- (b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:
 - (i) arises out of or in the course of or by reason of the design, execution and completion of the Works and the remedying of any defects, and
 - (ii) is attributable to any negligence, willful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, willful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].

17.2 Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Employer.

After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Employer's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3 Employer's Risks

The risks referred to in Sub-Clause 17.4 below are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,


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- (c) riot, commotion or disorder within the Country by persons other than the Contractor 's Personnel and other employees of the Contractor and Sub-contractor s,
- (d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor 's use of such munitions, explosives, radiation or radio-activity,
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,
- (g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, if any, and
- (h) any operation of the forces of nature which is Unforeseeable or against which an experienced Contractor could not reasonably have been expected to have taken adequate preventative precautions such as:
 - a. prevent loss or damage to physical property from occurring by taking appropriate measures, or
 - b. insure against such loss or damage.

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17.4 Consequences of Employer's Risks

If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor 's Documents, the Contractor shall promptly give notice to the Project Coordinator and shall rectify this loss or damage to the extent required by the Project Coordinator.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Project Coordinator and shall be entitled subject to Sub-Clause 20.1 [Contractor 's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under
- (b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (f) and (g) of Sub-Clause 17.3 [Employer's Risks], reasonable profit on the Cost shall also be included.

After receiving this further notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

17.5 Intellectual and Industrial Property Rights

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Employer shall indemnify and hold the Contractor harmless against and from any claim

alleging an infringement which is or was:

- (a) an unavoidable result of the Contractor's compliance with the Employer's Requirements, or
 - (i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or
 - (ii) in conjunction with anything not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.
- (b) a result of any Works being used by the Employer:

The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the Contractor's design, manufacture, construction or execution of the Works, (ii) the use of Contractor's Equipment, or (iii) the proper use of the Works.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

17.6 Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under Sub-Clause 16.4 [Payment on Termination] and Sub-Clause 17.1 [Indemnities].

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employers Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum stated in the Particular Conditions or (if a sum is not so stated) the Accepted Contract Amount.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

18 Insurance

18.1 General Requirements for Insurances

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms consistent with the details annexed to the Particular Conditions.

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If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, within the respective periods stated in the Contract Data (calculated from the Commencement Date), submit to the other Party:

- (a) evidence that the insurances described in this Clause have been effected, and
- (b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor 's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Project Coordinator.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Employer in accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Employer's Claims] or Sub-Clause 20.1 [Contractor 's Claims], as applicable.

18.2 Insurance for Works and Contractor 's Equipment

The insuring Party shall insure the Works, Plant, Materials and Contractor 's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability] and Clause 12 [Tests after Completion]).

The insuring Party shall insure the Contractor 's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor 's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor 's Equipment.

Unless otherwise stated, insurances under this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage,
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Employer's Risks],
- (d) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Employer's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Contract Data (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (e) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, Materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, Materials or workmanship
 - (ii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and
 - (iii) Goods while they are not in the Country, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].


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If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.5 [Employer's Claims] to payment of an amount equivalent to such commercially

reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

18.3 Insurance against Injury to Persons and Damage to Property

The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Contract Data, with no limit on the number of occurrences. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

Unless otherwise stated in the Particular Conditions, the insurances specified in this Sub-Clause:

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties,
- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
 - (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,
 - (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and
 - (iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.


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18.4 Insurance for Contractor's Personnel

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

19 Force Majeure

19.1 Definition of Force Majeure

Force majeure shall be understood as any exceptional event or circumstance which is out of the

parties control, and that could not have been foreseen prior to the signing of the contract, as described in Clause 19 of the contract, such as:

- (a) which is beyond a Party's control,
- (b) which such Party could not reasonably have provided against before entering into the Contract,
- (c) which, having arisen, such Party could not reasonably have avoided or overcome, and
- (d) which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war,
- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,
- (iv) munitions of war, explosive Materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

19.2 Notice of Force Majeure

If a Party is or will be prevented from performing any of its obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure, by attaching the evidence and indicating the consequences to the execution of the contract, to issue the corresponding suspension certificate.

The Party shall, having given notice, be excused performance of such obligations for so long as such Force Majeure prevents it from performing them.

Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

The contract may be cancelled by the Ministry of Works due to duly justified force majeure causes. If such is the case, the Employer shall pay to the Contractor an amount equivalent to the work executed, according to the certification of the Engineer and the Employer, deducting the payments done and the value of any claim that the Ministry may have against the Contractor, based on the project contract.

19.3 Duty to Minimize Delay

Each Party shall at all times use all reasonable endeavors to minimize any delay in the performance of the Contract as a result of Force Majeure.

A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

19.4 Consequences of Force Majeure

If the Contractor is prevented from performing any of his obligations under the Contract by Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], and suffers delay and/or incurs Cost by reason of such Force Majeure, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

- (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
- (b) if the event or circumstance is of the kind described in sub-paragraphs (i) to (iv) of Sub-Clause 19.1 [Definition of Force Majeure] and, in the case of sub-paragraphs (ii) to (iv), occurs in the Country, payment of any such Cost, including the costs of rectifying the Works and/or Goods damaged or destroyed by Force Majeure, to the extent they are not indemnified through the insurance policy referred to in Sub-Clause 18.2 [*Insurance for Works and Contractor's Equipment*]

After receiving this notice, the Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

19.5 Force Majeure Affecting Subcontractor

If any Subcontractor is entitled under any contract or agreement relating to the Works to relief from force majeure on terms additional to or broader than those specified in this Clause, such additional or broader force majeure events or circumstances shall not excuse the Contractor's non-performance or entitle him to relief under this Clause.

19.6 Optional Termination, Payment and Release

If the execution of substantially all the Works in progress is prevented for a continuous period of 84 days by reason of Force Majeure of which notice has been given under Sub-Clause 19.2 [Notice of Force Majeure], or for multiple periods which total more than 140 days due to the same notified Force Majeure, then either Party may give to the other Party a notice of termination of the Contract. In this event, the termination shall take effect 7 days after the notice is given, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment].

Upon such termination, the Project Coordinator shall determine the value of the work done and issue a Payment Certificate which shall include:

- (a) the amounts payable for any work carried out for which a price is stated in the Contract;
- (b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery: this Plant and Materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, and the Contractor shall place the same at the Employer's disposal;
- (c) any other Cost or liability which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works;
- (d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost); and


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- (e) the Cost of repatriation of the Contractor 's staff and labor employed wholly in connection with the Works at the date of termination.

19.7 Release from Performance under the Law

Notwithstanding any other provision of this Clause, if any event or circumstance outside the control of the Parties (including, but not limited to, Force Majeure) arises which makes it impossible or unlawful for either or both Parties to fulfil its or their contractual obligations or which, under the law governing the Contract, entitles the Parties to be released from further performance of the Contract, then upon notice by either Party to the other Party of such event or circumstance:

- (a) the Parties shall be discharged from further performance, without prejudice to the rights of either Party in respect of any previous breach of the Contract, and
- (b) the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 19.6 [Optional Termination, Payment and Release] if the Contract had been terminated under Sub-Clause 19.6.

20 Claims, Disputes and Arbitration

20.1 Contractor 's Claims

If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Project Coordinator, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.


If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Coordinator. Without admitting the Employer's liability, the Project Coordinator may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Coordinator to inspect all these records, and shall (if instructed) submit copies to the Project Coordinator.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Coordinator, the Contractor shall send to the Project Coordinator a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;


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- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Coordinator may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Coordinator.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Coordinator and approved by the Contractor, the Project Coordinator shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Project Coordinator shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.


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20.2 Amicable Settlement

If a dispute of any kind whatsoever arises between the Parties out of the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Employer or the Project Coordinator, the Parties shall attempt to settle such dispute amicably before the commencement of arbitration. Provided that, unless the Parties otherwise agree, arbitration may be commenced on or after the 56th day after the day on which notice of intention to commence arbitration of such dispute was given, even if no attempt to amicable settlement thereof has been made.

20.3 Arbitration

Unless settled amicably, any dispute in respect of which the arbitration judgment, according to the legislation of Belize (if any) has not become final and binding shall be finally settled by international arbitration.

Any dispute in respect of which:

- (a) the decision, if any, of the Project Coordinator has not become final and binding pursuant to Sub-Clause 20.9 [*Project Coordinator's Decision*] hereof, and
- (b) Amicable settlement has not been reached within the period stated in Sub-Clause 20.5 [*Amicable Settlement*], shall be finally settled, unless otherwise specified in the Contract, by Arbitration

according to the UNCITRAL Arbitration Rules. The Arbitrator is to be agreed upon by both Parties or failing agreement, to be appointed in accordance with the Belize Arbitration Act, Chapter 125. The Arbitrator or Arbitrators shall have the powers conferred on them by the Arbitration Act and any statutory amendments thereof. The award of the Arbitrator(s) shall be final and binding on all Parties. The said arbitrator/s shall have full power to open up, review and revise any decision, opinion, instruction, determination, certificate or valuation of the Project Coordinator related to the dispute.

Neither Party shall be limited in the proceedings before such arbitrator/s to the evidence or arguments put before the Project Coordinator for the purpose of obtaining his said decision pursuant to Sub-Clause 20.9 [*Project Coordinator's Decision*]. No such decision shall disqualify the Project Coordinator from being called as a witness and giving evidence before the arbitrator's on any matter whatsoever relevant to the dispute.

Arbitration may be commenced prior to or after completion of the Works, provided that the obligations of the Employer, the Project Coordinator and the Contractor shall not be altered by reason of the arbitration being conducted during the progress of the Works

20.4 Project Coordinator's Decision

If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with, or arising out of, the Contract or the execution of the Works, whether during the execution of the Works or after their completion and whether before or after repudiation or other termination of the Contract, including any dispute as to any opinion, instruction, determination, certificate or valuation of the Project Coordinator, the matter in dispute shall, in the first place, be referred in writing to the Project Coordinator, with a copy to the other Party. Such reference shall state that it is made pursuant to this Clause. No later than the 84th day after the day on which he received such reference the Project Coordinator shall give notice of his decision to the Employer and the Contractor. Such decision shall state that it is made pursuant to this Sub-Clause.


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Unless the Contract has already been repudiated or terminated, the Contractor shall, in every case, continue to proceed with the Works with all due diligence and the Contractor and the Employer shall give effect forthwith to every such decision of the Project Coordinator unless and until the same shall be revised, as hereinafter provided, in an amicable settlement or an arbitral award.

If either the Employer or the Contractor be dissatisfied with any decision of the Project Coordinator, or if the Project Coordinator fails to give notice of his decision on or before the 84th day after the day on which he received the reference, then either the Employer or the Contractor may, on or before the seventieth day after the day on which he received notice of such decision, or on or before the seventieth day after the day on which the said period of 84 days expired, as the case may be, give notice to the other Party, with a copy for information to the Project Coordinator, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the Party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 20.10 [*Failure to Comply with Project Coordinator's Decision*] no arbitration in respect thereof may be commenced unless such notice is given.

If the Project Coordinator has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence arbitration as to such dispute has been

20.05 Failure to Comply with Project Coordinator's Decision

Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 20.4 [Project Coordinator's Decision] and the related decision has become final and binding, either Party may, if the other Party fails to comply with such decision, and without prejudice to any other rights it may have, refer the failure to arbitration in accordance with Sub-Clause 20.6 [Arbitration]. The provisions of Sub-Clauses 20.9 [Project Coordinator's Decision] and 20.5 [Amicable Settlement] shall not apply to any such reference

21. Duties and Taxes

21.1 Foreign Taxation

The prices offered by the Contractor shall include all taxes, duties and other charges imposed outside the Employer's country on the production, manufacture, sale, and transport of the Contractor's Equipment, Plant, materials, and supplies to be used on or furnished under the Contract, and on the services performed under the Contract.

21.2 Landing Charges

The Contractor shall bear all expenses (the preparation of application forms, certification forms, schedules, and invoices, together with the cost of insurances, freight wharfage charges, storage costs, customs clearance including broker's charges, inland freight etc.) in connection with the shipment and landing of any plant, materials or other things landed or brought into or dispatched from Belize by him for the purposes of the Contract and will be deemed to be included in the contract Price.

21.3 Local Taxation

Customs duty and all other related duties, taxes, General Sales Tax (GST), charges and levies whatsoever on subletting of works, imports and exports and local purchases shall be waived, on materials, plant and equipment, including tools, instruments and spare parts imported by the Contractor for the purposes of the Contract.

The Contractor's local staff, personnel and labour will be liable to pay personal income taxes in the Employer's country in respect of their salaries and wages as are being chargeable under the laws and regulations for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such laws and regulations.

21.4 Local Taxation on Sub-contractors

- (a) The Contractor shall where entering into any subcontract for the execution of any part of the works incorporate in such Subcontract (by reference or otherwise) the provisions of this clause in relation to plant, goods or materials brought on to the Site by the Sub-contractor.
- (b) The Contractor shall obtain from each nominated Sub-contractor within seven (7) days of the award of the respective Sub-contractor's, 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 Project Coordinator.
- (c) The Contractor shall assist all the Sub-contractor's, nominated or otherwise with the preparation of their documents so that a uniform presentation is made to the appropriate Authorities.
- (d) Triplicate copies of invoices for all materials imported free of duty shall be forwarded to the Employer for retention.
- (e) The Contractor shall allow in his offer for the time and costs involved in the above procedures and in making the necessary applications.

21.5 Charges in Connection with Imported Goods or Materials

Notwithstanding the import duty and other tax concessions, the Contractor will be responsible for the cost of licenses, bonds, deposits, taxes, stamp duties, bank charges (for letters of credit of sight drafts, etc.,) wharfage dues, package tax and any other charges in connection with the importation of goods and materials.


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22. Personal Liability

22.1 Government Employees not Liable

Neither the Employer nor the Project Coordinator nor any of their staff, nor the Project Coordinator's Representative, nor any member or officer of the Government shall be in any way personally bound or liable for the acts or obligations of Government under the Contract or answerable for any default or omission in the observance or performance of any of the acts, matters or things which are herein contained.

23. Coordinator of Work

23.1 Coordinator of Work with Others

The Contractor's attention is directed to the fact that he may be required to co-ordinate his operations with work being performed or to be performed on other Contracts in the area of the

Works, with work of Sub-Contractors, utility companies and others as may be required. In particular, he will be required to co-operate when utilities are being installed. A number of utilities must necessarily be relocated during the course of the Contract, and due allowance must be made for this in the scheduling of work.

The right is reserved by the Employer to do work by other Contractors or by Government forces and to permit public utilities, companies and others to do work during the progress and within the limits of or adjacent to the Works. The Contractor shall conduct his work and cooperate with such other parties so as to cause as little interference as possible with such other work as may be progressing at the same time. If there is a difference of opinion as to the respective rights of the Contractor and others doing work within the limits of or adjacent to the Contract, the Project Coordinator will decide as to the respective rights of the various parties involved in order to secure the completion of the Works in general harmony and in a satisfactory manner and his decision shall be final and binding on the Contractor .

In the case of interference between the operations of different Contractors, the Project Coordinator shall be the sole judge of the rights of each Contractor and of the entire project and in all cases his decision shall be accepted as final and no cause for claim.

24. Property in Materials

24.1 Property in Materials

All materials and things of any kind obtained from excavation or found on or under the site or under any additional site which the Contractor may be allowed to occupy shall remain the property of the Employer and shall not be sold or otherwise disposed of without the written authority of the Project Coordinator or the Project Coordinator's Representative unless otherwise expressly provided for in the Specifications.


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APPENDIX A

Form of Guarantee Letter

Letter of Guarantee

To : MINISTRY OF WORK, BELIZE

This is to inform your esteemed office that my duly represented Overseas Investment & Development Corp. (OIDC) holds itself liable before MINISTRY OF WORK, BELMOPAN, BELIZE in order to guarantee the obligations stipulated the Contract to be signed between MINISTRY OF WORK, BELMOPAN, BELIZE and our 100% owned subsidiary, Overseas Engineering & Construction Co. LTDA, S.A. , which is the Advance payment (USD12,500,000) for the projects in execution, according to the conditions mentioned in each instrument, in regards to the Contract entitled Corozal – Sarteneja Road Upgrading dated ----- 2019.

The coverage of this Guarantee Letter shall remain valid until Overseas Engineering & Construction Co. Ltda, S.A. is fully freed of its obligations as defined under the abovementioned Contract. We oblige ourselves to refund in favor of MINISTRY OF WORK any sum of money of the said amount, with or without consent of the debtor, and authorize MINISTRY OF WORK to qualify the validity, suitability or inappropriateness, liquidation and payment of any claim to the account of the said amount, as well as all legal and extrajudicial expenses, costs, charges and due primes.


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In that regard, we hereby irrevocably undertake to immediately pay MINISTRY OF WORKS, all the amounts it pays for those aspects, as well as all related expenses, at the sole presentation of documents and receipts that justify any expenditure up to and not exceeding USD12,500,000.00 for Advance payment in total.

Yours truly,

CHUNG, CHIA-FU
President
Overseas Investment & Development Corp. (OIDC)

SECTION 4

SCOPE OF WORK


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100 GENERAL AND PRELIMINARY

101 PROJECT: COROZAL TO SARTENEJA ROAD UPGRADING

Short Description of the Works

1. The Works within this project comprise the design and upgrading to paved standard with a double chip and seal bituminous treatment of 43.2 km (27 miles) of primary roads and the construction of two (2) bridges, Laguna Seca and Pueblo Nuevo.

Location of Works, Access to Works, Working and Storage Areas

(i) The Works are located at Corozal District, Northern part of Belize. The precise extent of the Works is shown on the Drawings and maps to be submitted as part of the Works.

(ii) Working areas, storage areas and disposal areas for excess excavated material are not made available by the Employer, and shall be compliant with the updated Environmental & Social Impact Assessment (ESIA) and the Environmental Compliance Plan (ECP), approved by the Department of Environment (DoE).

(iii) Before exercising any right negotiated by him in connection with wayleaves or accommodation outside the Site, the Contractor shall notify the Project Coordinator in writing of the arrangements he has made.

(iv) All necessary support will be given by the Employer for the access of the Contractor's employees to the Works and the Contractor shall be responsible for seeing that such employees obey all regulations made by the Employer in regard to the conditions of access to and over his property.

(v) The Contractor shall take all reasonable steps to maintain the free movement of traffic on any permanent roads used by him to progress the Works. All permanent and site access roads are to be maintained free of any spillage from the Contractor's vehicles.

(vi) The Contractor shall provide and maintain to the Project Coordinator's approval all temporary roads he may require, and shall permit the free use by the Employer, or any person employed by the Employer, subject to such use not causing undue damage or interference with the Contractor.

102. Scope of Contract

1. The Works to be executed under the contract comprises of three (3) sub-components as follows:

a) Design and Road Related Studies as detailed in the Terms of Reference (TOR) for


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Consultancy Services for the Design and Upgrading of the Corozal -Sarteneja Road as per Appendix 1;

b) Upgrading to paved standard with a double chip and seal bituminous treatment of 43. km (27 miles) as per the terms and conditions of contract

c) Cost of Construction Supervision Services in accordance with Terms of Reference for Construction Supervision as per Appendix 1

3. Design and Road Related Studies

The Scope of Design Services to be performed by the Contractor under this Agreement and the proposed time period for such performance shall be in accordance with the terms of this agreement, which includes the Terms of Reference attached hereto as Appendix 1, and incorporated herein. These services shall be initiated no later than one (1) Calendar month after contract has become effective and shall be completed not later than twelve (12) consecutive calendar months after commencement of design services.

Experts: For the performance of the design services hereunder, the Contractor shall assign the Six experts who fulfils the qualifications stated in the Terms of Reference.

Any replacement of the Experts, once approved by the Ministry of Works, shall require written approval of the Project Coordinator, Ministry of Works.

The Contractor shall carry out the Design Services for 43.2 km (27 miles) and two bridges at Pueblo Nuevo and Laguna Seca Sites inclusive of all Deliverables and Reports as prescribed in the Terms of Reference for Consultancy Services for the Design and Upgrading of the Corozal -Sarteneja Road as per Appendix 1. The design services include but not limited to the following main deliverables /reports/studies which shall be approved and accepted by the Project Coordinator, Ministry of Works:


(i) Carry out a Topographic and Cadastral Survey of the Corozal – Sarteneja Road;

(ii) Carry out Geotechnical Survey of the Road route and identify suitable borrow pits and quarries for materials to be used on the road upgrade;

(iii) Conduct a Traffic Analysis which should cover traffic projections up to 2035;

(iv) Conduct Hydrographic and Hydraulic Modelling of waterways along the routes particularly at the Pueblo Nuevo and Laguna Seca Bridge Sites to assist with Road and Bridge Design;

(v) Update the Environmental and Social Impact Study as per the Terms of Reference prepared by the Department of the Environment;




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4. Provision of Facilities, Equipment, Instruments and Vehicles for Construction Supervision Team

The Contractor(s) should make available suitable Office space for the exclusive use of the Construction Supervision Team at a location to be determined with the approval of the Project Coordinator of the Project Execution Unit (PEU). Additionally, the Contractor shall provide the following facilities available for the exclusive use of the Construction Supervision Team during the Construction Phase:

- a) Field Office space for the Project Coordinator and his team 's exclusive use comprising of an area of at least 100 squares meters, complete with suitable furniture, adequate shelves, work desks and seating for at least 6 persons, chilled bottled drinking water facility and access to two (2) suitable bathrooms, with lockable door, in addition to stationery and other consumables (paper, ink, etc).
- b) Computer's Hardware and Software (HW & SW) for each of the 6 desks, such as AutoCad (2016 or newer version) and MS Office (Word, Project, and Excel), Office HW & SW consumables, telephone & internet communication devices and relevant telephone/internet bills.
- c) Consultant's Office room equipped with proper Lighting, Internet Service and Air Conditioning
- d) Provision of free-of-charge 24/7 utilities such as: electricity, potable water, fixed internet connection and/or Wifi
- e) Security of the site compound, by proper provision of gatemen/watchmen, etc., as requested to ensure security and safety of Project Coordinator's Office & Staff
- f) Arrangement for cleaning the office.
- g) Five (5) Crew Cab, 3.0 litre Engine, 4 cylinder, 4 door 4x4 Pickup trucks capable of carrying five persons licensed and comprehensively insured by the Contractor for the exclusive use of the Project Coordinator and the Construction Supervision Team. The Contractor shall provide fuel, oil, regular servicing at the dealership of the supplier as per the Manufacturers Guidelines, including replacing defective vehicle parts, tires, shocks, brake pads, wipers and the like whenever required.
- h) Four (4) lodgement units for accommodation of the Project Coordinator and his key staff of the Construction Supervision Team with adequate facilities and conveniences such as Air Conditioning, beds, water, electricity and internet.


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**5. BUDGET FOR OPERATIONS OF THE PROJECT EXECUTION UNIT
(Project Coordinator and his staff)**

The budget for the establishment of a Project Execution Unit (PEU) to supervise the execution of the Works is tabled below to cover all the responsibilities of the PEU as provided for in the terms of Reference for the Supervision of the Works herein attached and incorporated in the Appendix 1. The budget and stated fees in the table below covers a estimated time period of 48 months inclusive of the 12 months Defects Liability Period.

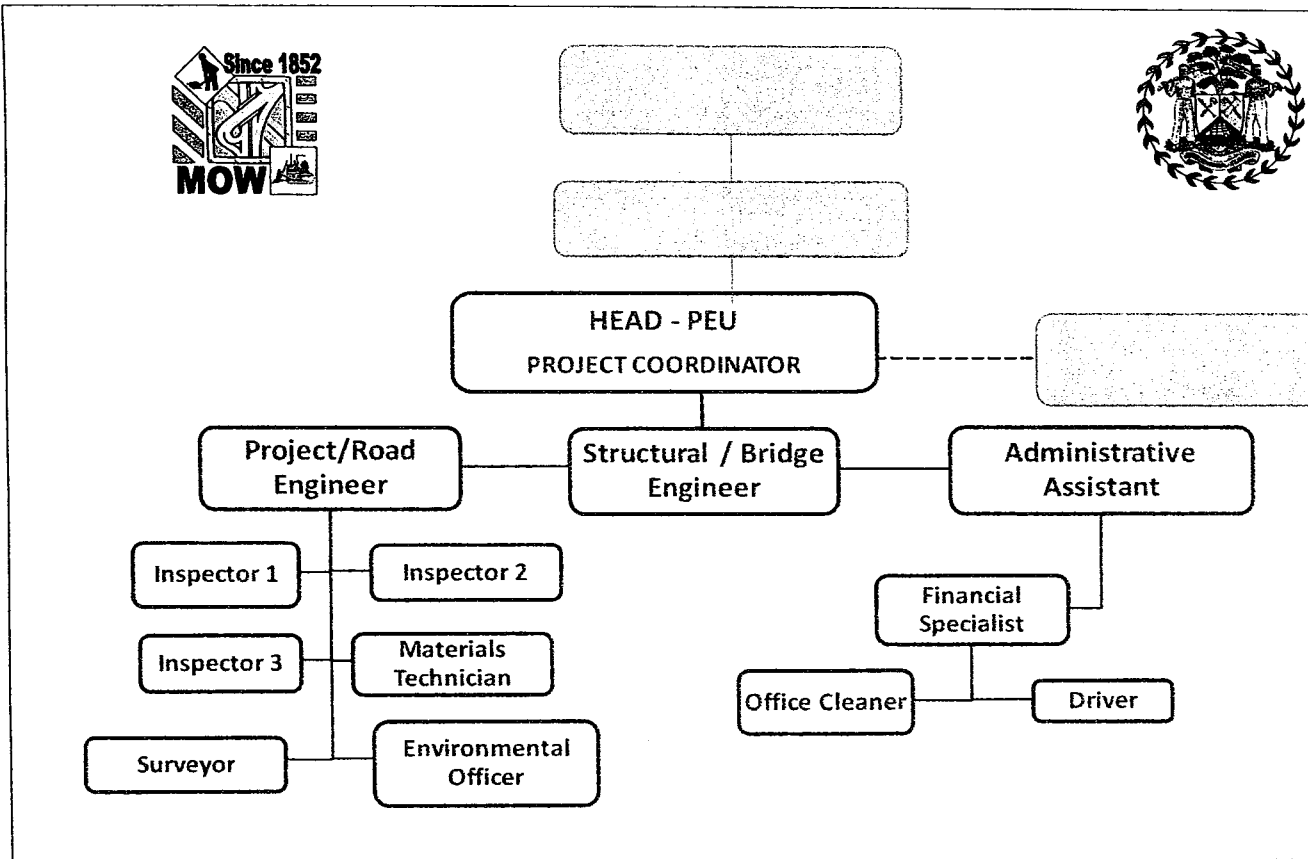
Any additional costs, as determined by the Project Coordinator, due to an extension of time for the works granted to the Contractor under this Contract shall be wholly borne and be the responsibility of the Contractor.

BUDGET FOR SUPERVISION OF DESIGN-BUILD CONTRACT
(Corozal - Sarteneja Road Upgrading Project)

Fees	Year 1	Year 2	Year 3	Year 4	Defects Liability Period	TOTAL
Team Personnel/Staff						
Project Coordinator	115,200.00	115,200.00	115,200.00	115,200.00	115,000.00	
Project Engineer	100,800.00	100,800.00	100,800.00	100,800.00	100,800.00	
Structural/Bridge Engineer	115,200.00	115,200.00	115,200.00	-		
Materials Technician	60,000.00	60,000.00	60,000.00	60,000.00		
Surveyor	72,000.00	72,000.00	72,000.00	72,000.00		
Inspector 1	60,000.00	60,000.00	60,000.00		60,000.00	
Inspector 2	-	60,000.00	60,000.00	60,000.00		
Inspector 3		60,000.00	60,000.00	60,000.00		
Environmental Technician	60,000.00	60,000.00	60,000.00	60,000.00		
Financial Specialist	70,000.00	70,000.00	70,000.00	70,000.00	70,000.00	
Administrative Assistant	57,600.00	57,600.00	57,600.00	57,600.00	6,200.00	
Driver	28,800.00	28,800.00	28,800.00	28,800.00		
Office Cleaner/Janitor	18,250.00	18,250.00	18,250.00	18,250.00		
Sub Total Personnel	\$757,850.00	\$877,850.00	\$877,850.00	\$702,650.00	\$352,000.00	\$3,568,200.00
Travel and Subsistence						
Mileage Allowance	8,000.00	10,000.00	10,000.00	8,000.00	2,000.00	
Subsistence	40,000.00	55,000.00	55,000.00	40,000.00	10,000.00	
Accommodation	15,000.00	8,000.00	8,000.00	8,000.00	8,000.00	
Maintenance of Grounds	16,000.00	16,000.00	16,000.00	16,000.00	15,000.00	
Subtotal: Travel & Subsistence	79,000.00	89,000.00	89,000.00	72,000.00	35,000.00	364,000.00
Operating Expenses						
Rental - Office Space	36,000.00	36,000.00	36,000.00	36,000.00	36,000.00	
Office Equipment Computers, Printers, GPS, Cameras, Windows Software Suite	80,000.00	30,000.00	20,000.00	10,000.00	8,000.00	
Utilities - internet, electricity, water etc.	48,000.00	48,000.00	48,000.00	48,000.00	48,000.00	
Office Furniture & Equipment	60,000.00	20,000.00	10,000.00	10,000.00	3,000.00	
Office Sundries	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	
Office Supplies	10,000.00	12,000.00	12,000.00	10,000.00	10,000.00	
Fuel	155,000.00	180,000.00	180,000.00	155,000.00	50,000.00	
Subscription & Advertisement	10,000.00	10,000.00	8,000.00	8,000.00	1,000.00	
Miscellaneous expenses	10,000.00	20,000.00	50,000.00	50,000.00	50,000.00	
Sub Total: Operating Expenses	417,000.00	364,000.00	372,000.00	335,000.00	214,000.00	1,702,000.00
Vehicle Procurement						
5 No. Transport/Vehicles	222,000.00	148,000.00	-	-		
Repairs & Maintenance of Vehicle	15,000.00	20,000.00	25,000.00	25,000.00	15,000.00	
Comprehensive Insurance	15,000.00	18,000.00	18,000.00	18,000.00	9,000.00	
Licensing	1,800.00	2,000.00	2,000.00	2,000.00	2,000.00	
Survey Equipment: T/Station	80,000.00	7,000.00	7,000.00	7,000.00	7,000.00	
Sub Total for Transport	333,800.00	195,000.00	52,000.00	52,000.00	33,000.00	665,800.00
TOTAL THIS ESTIMATE	1,587,650.00	1,525,850.00	1,390,850.00	1,161,650.00	\$634,000.00	6,300,000.00
						3,150,000.00

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ORGANOGRAM FOR THE PROJECT MANAGEMENT UNIT



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103 Upgrading /Construction of Corozal – Sarteneja Road

The Works within this project comprise the design and upgrading to paved standard with a double chip and seal bituminous treatment of 43.2 km (27 miles) of primary roads and the construction of two (2) bridges, Laguna Seca and Pueblo Nuevo. The upgrading of the Corozal - Sarteneja Road under the provisions of this Contract shall include, but not limited, to the following:

- (i) Upgrading to paved standard with double chip seal of 43.2 km of existing road pavement as per approved design
- (ii) Improvement to the roadside drains and selected drainage culverts. Entrance culverts to residential properties alongside roadway to enable access shall be included on the construction plan
- (iii) Entrance Culverts to adjacent properties
- (iv) Improvement to the roadside shoulders
- (v) Road safety measures including, Road Humps, Guardrails, Road Striping, Cats Eyes, Vertical and Horizontal Signs
- (vi) Lighting at sections identified by the Employer, this requirements will be considered by the contractor and discuss further based on BOQ budget
- (vii) Construction of Bus laybys and Bus Stops at selected areas

- (ix) Road widening where applicable
- (x) Construction of two (2) bridges at Pueblo Nuevo and Laguna Seca ferry sites.

104 Possession of Site

In amplification of Clause 8 of the Conditions of Contract. Subject to the requirements of the Contract with respect to the programme of work submitted by the Contractor, the Contractor will be given possession of the site in the sections and periods after Commencement of Contract as noted in the Letter of Commencement.

105 Completion Periods

- (1) The Contract Works are to be completed within the periods from the Commencement of the Contract as stated in the Contract Data:

106 Construction Sequencing

The Contractor needs to ensure that the works programme does not close any of the roads. Appropriate traffic measures need to be in place to keep traffic on the roads flowing at all times.

107 Programme and Method Statements

The Contractor shall submit a detailed programme and a statement showing how he proposes to carry out the Works. The programme shall show the estimated dates on which the various sections of the Works will commence together with the estimated rate of construction so that the whole of the Works may be completed within the Contract period. The Contractor shall set out details of the Method Statement for the Works to demonstrate how it will meet the Employer's objective and requirements. At a minimum, the Method Statement shall address the following:

- Details of the arrangements and methods which the Contractor proposes to adopt for the design and construction of the Works, in sufficient detail to demonstrate their adequacy to achieve the requirements of the Contract including completion within the Time for Completion.
- Outline of the arrangements which the Offeror proposes to adopt to manage coordination of Site access.
- Commentary on the geotechnical and subsurface aspects of the Works including materials, material sources and any constraints.
- Commentary on logistics and traffic management.


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- Outline of the arrangements which the Contractor proposes to adopt to ensure compliance with the Employer's Requirements.
 - Outline of the arrangements which the Contractor proposes for testing as called for in the Employer's Requirements.
 - Outline of arrangements which the Contractor proposes for conducting training as specified in the Employer's Requirements.
 - Outline of arrangements for handover, including completion of as-built drawings, preparation of operation and maintenance manuals, and any additional matters.
- (1) The Contractor's Programme is to be supported by a list of plant and support facilities by which the Contractor will achieve the progress set out in it.
 - (2) The Contractor's plant facilities and outputs quoted are to make due allowance for sufficient plant being on the site to ensure the maintenance of his programme and sufficient spare items of plant are to be available to allow for unserviceability or ineffective working.
 - (3) The Contractor is to progress the Works thoroughly in order to ensure that the programme submitted is strictly adhered to at all times.
 - (4) The Contractor's programme should specify in detail when possession is required of land so that adequate arrangements for this can be made in good time.
 - (5) The Contractor shall prepare full scale 100 m trial strips of sub-base, base course and surfacing layers over the full width of the road at least one month before the relevant operation is due to commence. Where materials are to be stockpiled in advance of placing them in the permanent works the Contractor shall prepare trial strips in advance of the stockpiling operation. In the event the trial strips are unsatisfactory the Contractor will remove the trial strips and prepare new trial strips to the approval of the Project Coordinator. Only one payment will be made under the relevant bill item regardless of how many trial strips are necessary. The Project Coordinator may, at his discretion, incorporate trial strips into the permanent works.
 - (6) Where it is anticipated that aggregates will be stockpiled in advance of the Works, the Contractor will indicate such operations and rates of production in his works programme and indicate the location of stockpiles. The Project Coordinator will sample stockpiled materials from time to time to ensure compliance with the specification. Such testing will not in any way relieve the Contractor of his responsibilities under the contract.
 - (7) For all major items of work such as culverts, culvert inlets and outlets, sumps, retaining walls, revetments, masonry work, concrete work, compacted earth, gabion baskets and the like, the Contractor shall prepare trial sections or samples as appropriate, in advance of full scale work, for the approval of the Project Coordinator.


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- (8) Trimming of earthwork slopes shall be carried out as soon as possible after the bulk earthworks have been completed. The cumulative length of untrimmed work for the whole project shall not exceed 100 metres, measured along the road, channel, berm or bund centre line, at any one time. Interim payment for bulk earthworks may be withheld if the above requirement is not met.

108 Particular Matters to be Brought to the Attention of the Contractor

- (1) The Contractor shall take note that the upgrading Works are to be carried out over some very busy section of road where persons live, work and use as a commuter route. The Contractor shall be obliged to maintain and allow accesses to these persons' businesses and residences.
- (2) The Contractor's hours of working shall be limited to normal working hours. Night working and weekend working will only be permitted if the Contractor can demonstrate that local residents will not be disturbed by construction activities.
- (3) Noise levels at properties adjacent to the Works shall be limited to L_{eq} 70 dB(A) and L_{max} 85dB(A) (maximum noise level in any hour).
- (4) The Contractor shall ensure that any nuisance caused by dust is kept to a minimum by appropriate measures including the use of water sprayed on the road surface. If in the opinion of the Project Coordinator the Contractor is taking insufficient precautions to avoid such dust nuisance the Project Coordinator may issue a written warning and in the event of subsequent dust nuisance the Contractor will be liable to liquidated damages in accordance Clause 4.18 of the Conditions of Contract and be responsible, at no cost to the Employer, for any cleaning of property that the Project Coordinator deems to have been adversely affected by dust.


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109 Survey of Existing Properties, Roads, Lands, Crops etc

- (1) Where required, the Contractor, in conjunction with the Project Coordinator and any relevant authority, owners or occupiers, shall carry out topographical and where necessary cadastral surveys of the condition of existing properties, roads, lands, crops etc, which may be affected by the Works. The results shall be recorded in appropriate documents and submitted to the Project Coordinator for approval so that the approved copies constitute a record of the condition prior to commencement.

110 Standards and Alternative Standards

- (1) Materials, equipment and methods shall comply with relevant British Standards and Code of Practice or any other equivalent international standards as determined and approved by the Employer.

The Contractor may propose, for the Project Coordinator's approval, the adoption of

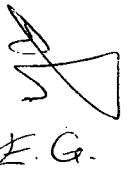
alternative standards, in which case he shall provide comprehensive details and explanations, including translation of foreign language standards, with his proposal. The Contractor shall allow for the time necessary for review and approval of such alternative standards by the Project Coordinator.

111 Safety Policies etc

- (1) When required the Contractor shall provide the Project Coordinator with a copy of the written safety policy and any revisions thereof which he has prepared as an Employer and which relate to the execution of the Works. Prior to commencement of work on the Site the Contractor shall provide the Project Coordinator with a copy of the relevant notices submitted to the Government of Belize to satisfy Health and Safety Requirements and shall inform the Project Coordinator of the name and location of his appointed safety supervisor(s).
- (2) The Contractor shall also provide the Project Coordinator with written details of any control measures he proposes to institute in compliance with the control of substances hazardous to health.

112 Safety of Works and Adjacent Structures

- (1) The Contractor shall at his own expense provide and erect to the approval of the Project Coordinator all supports required to protect efficiently all structures or works requiring support as a result of the Works and shall remove the same on completion.



113 Explosives and Blasting

- (1) The Contractor shall obtain the prior written approval of the Project Coordinator and any other relevant statutory body to his procedures and methods for using and storing explosives. The storage of blasting explosives shall be in accordance with the relevant statutory provisions and established procedures.

114 Temporary Fences


- (1) The Contractor shall erect and maintain at his own expense suitable and approved temporary fencing as may be necessary to meet his obligations under the Contract. Access shall be provided in the temporary fencing as necessary for the use of the occupiers of adjacent land(s).

115 Existing Services

- (1) No warranty is given as to the accuracy or completeness of the information on existing

services included in the Contract. The Contractor shall consult all relevant authorities and services owners before commencing any excavations and shall satisfy himself as to the exact position of existing services which affect or may be affected by the Works. If any service is found to exist but is not as indicated in the Contract then the Contractor shall at once give written notification to the Project Coordinator. The Contractor shall record the position of all located existing services on the horizontal alignment drawings a copy of which shall be made available by the Contractor to the Project Coordinator.

- (2) The Contractor shall execute the Works in such a manner that he does not damage or interfere with existing services on or near the Site. If damage or interference is so caused the Contractor shall make his own arrangements, to the approval of the Project Coordinator and the relevant authority, to execute the repairs at his own cost. If the service authority concerned elects to make good the damage, the Contractor shall give all facilities and shall pay all charges.
- (3) The Contractor shall make his own arrangements for any diversion or removal of services, which he may require for his own convenience or method of working and shall obtain the prior approval of the Project Coordinator to such arrangements.
- (4) Permanent diversions of some public utility services may be required. This work may be carried out by others.
- (5) Where public utility services are to be diverted the works shall be carried out in such a way that the service is maintained while the diversion is installed. The existing service shall not be broken into until the diversion is in place. Should temporary diversions of services be required, the Contractor shall be responsible for arranging such temporary diversions with the relevant Authority who will carry out the work of diverting the pipe or cable.
- (6) The planning and coordination of the work with and of the services authorities shall be the Contractor's responsibility and due allowance for such shall be made in the Contractor's programme.


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Services for Site Use

- (1) The Contractor shall arrange at his own cost the supply of electricity, fresh water, telephone, compressed air and other services as necessary to his Site establishment, including the Resident Project Coordinator's Office, and shall provide, maintain and remove on completion all pipes, cables and fittings which carry such services to his operations. The Contractor shall provide an adequate supply of safe drinking water on the Site. All electrical installations forming part of the Temporary Works shall comply with the relevant provisions of the current regulations for electrical installations applicable in Belize.

117 Sanitary Conveniences

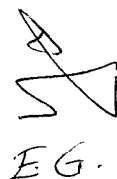
- (1) Sanitary conveniences for the use of persons employed on the Works shall be provided and maintained by the Contractor in accordance with the appropriate regulations. All persons engaged upon the Works shall be required to use them. The Contractor shall provide and maintain temporary arrangements for the proper discharge of sewage, waste and drainage from or in connection with the Works.

118 Materials on and under Site

- (1) Materials arising from clearance of the Site, soil stripping and excavations shall belong to the Employer and shall not be removed from the Site except as required by the Contract and with the approval of the Project Coordinator.

119 Boundaries Cut Through

- (1) Fences, walls, etc. crossed by the Works and forming boundaries of plots outside the area occupied by the Works shall not be cut through or destroyed for more than the distance necessary to permit the erection of new fencing etc. and the Contractor shall make the ends of the cut fences reasonably secure. Where fences or walls are damaged or destroyed, the whole shall be restored and reinstated with like materials to the satisfaction of the owners, occupiers and the Project Coordinator.



120 Drains, Streams, Watercourses etc

- (1) Drains, pipes, canals, channels, water courses or streams affected by the Contractor 's operations are to be maintained by temporary channels or pumping if necessary and on completion restored to their original condition as soon as possible after the relevant operations have ceased. The Contractor shall notify the Project Coordinator in writing 14 days in advance of his intention to start any part of the Works affecting watercourses, canals, streams, drains, pipes, channels etc. The Contractor shall be responsible for maintaining the watercourses within the Site in effective working condition.
- (2) The Contractor shall execute the works in a manner that will avoid the pollution or siltation of rivers, streams or the sea. If in the opinion of the Project Coordinator the Contractor is taking insufficient precautions to avoid such pollution or siltation the Project Coordinator may issue a written warning and in the event of subsequent damage, pollution or siltation the Contractor will be subject to liquidated damages in accordance of the Contract.
- (3) The Contractor shall take steps to ensure that existing vegetation is disturbed as little as possible in the execution of the Works. Flagrant breaches of this clause will be treated as damage to property and dealt with by the provisions of the Contract.

121 Keeping Works Free from Water


- (1) Except where underwater construction is required the Contractor shall execute all work in the dry and shall construct any temporary drains or other works that may be necessary for the purpose.

122 Slips

- (1) The Contractor shall make good any damage or defect caused by slips to any cuttings, excavations or embankments on the site and shall do all necessary work to prevent or remedy the same, payment being subject to Clause 20 of this Contract.

123 Compensation water and flow past structures

- (1) The Contractor shall ensure that during the construction of dams, barrages and other structures across rivers, watercourses and existing channels and up to the time of completion of the relevant parts of the Works, the whole flow of the rivers or channels shall be allowed to pass the Works except for such quantity as the Contractor may reasonably require and has been approved by the Project Coordinator and relevant authority for the execution of the Works.
- (2) After completion of those parts of the Permanent or Temporary Works which form a barrier to rivers, watercourses or channels, the Contractor shall pass such quantities of water into the river, watercourses or channel downstream of the structures as directed by the Project Coordinator. The Contractor shall not alter the rate of flow of such water except with the approval of the Project Coordinator.


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124 Protection of Completed Work

- (1) The Contractor shall protect completed work from damage during subsequent operations, from the weather or any other cause, including the naturally aggressive nature of the environment in which the Works are to be constructed and make good any damage so arising.

125 Traffic

- (1) Prior to commencing any work in or which may affect the use of any highway, the Contractor shall obtain the written approval of his proposed methods of working from the Project Coordinator and the Highway and the Police Authorities. Throughout the duration of the Contract, the Contractor shall co-operate with the Ministry of Transport and Police Authorities concerning works in, or access to, the highway. Any requirements of such Authorities shall be notified in writing by the Contractor to the Project Coordinator.

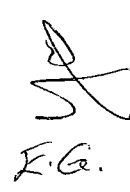
- (2) Where required, the Contractor shall provide and maintain all necessary temporary diversions which shall be operational before interference with existing carriageways, footways or public right of way.
- (3) Reasonable access shall be maintained to properties adjacent to the Works.
- (4) The Contractor shall provide traffic lights, flagmen and signalling equipment as may be necessary to control the traffic to the satisfaction of the Project Coordinator. Roadways closed to traffic shall be protected by effective barricades on which shall be placed acceptable warning and directional signs. All temporary detour routes shall be indicated clearly throughout their entire length. All barricades and obstructions shall be illuminated at night and all lights shall be lit from sunset to sunrise.

126 Damage to Access Roads

- (1) The Contractor shall ensure that damage to any public or private roads, footpaths and tracks used by any vehicles or plant proceeding to or from the Site is kept to a minimum and he shall be responsible for the cost of all repairs necessary to restore such roads, tracks or footpaths to the satisfaction of the Project Coordinator and/or controlling authorities.

127 Datum, Co-ordinates, Surface Levels or Sea Bed Levels

- (1) Levels shown on the drawings are given in metres above Ordnance Survey Datum. Local control points for construction use will be indicated by the Project Coordinator.
- (2) All co-ordinates are grid co-ordinates based on WGS 84 Datum as per the Terms of Reference in the Contract. The appropriate value for a given location is available from Lands and Surveys Department from the Ministry of Natural Resources of Belize.
- (3) Before commencing work on any section of the Works, the Contractor shall survey [and level] the original ground surface or sea-bed and shall prepare and submit to the Project Coordinator plans and sections for agreement.



128 Testing

- (1) The Contractor shall provide all staff, labour and equipment necessary for the performance of all tests required, or he may employ an independent testing laboratory approved by the Project Coordinator to carry out all or part of the testing.
- (2) If the Contractor provides his own testing facilities, the equipment staff and method of operation shall be subject to the approval of the Project Coordinator; for any additional testing required by the Project Coordinator to confirm validity of tests results from the Contractor, the expenses and cost will be the Employer's responsibility if the test results are the same as Contractor's statement.

In either case, the Project Coordinator shall have access to the laboratory(ies) at all reasonable times.

The Contractor shall obtain the approval of the Project Coordinator for his proposed testing arrangements and shall submit all results without delay.

129 Photographs

- (1) The Contractor shall provide the Project Coordinator with sets of colour photographs taken at the following stages:
- (I) commencement
 - (ii) at monthly intervals during construction, or as otherwise instructed by the Project Coordinator
 - (iii) substantial completion

Photographs shall be taken from locations directed by the Project Coordinator. The negative and two colour prints, approximately 150 x 90mm, of each photograph shall be supplied. Each print shall be neatly mounted on plain backing and titled. A set will consist of 36 photographs, and each set shall be handed to the Project Coordinator within 14 days of the photographs being taken.

The negatives and all prints shall be the property of the Employer.

130 Notice Boards

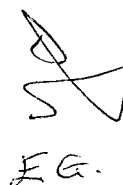
- (1) The Contractor shall provide and erect notice boards as detailed in Appendix A. No other notice boards or signs of any description shall be erected unless directed or approved.

131 "Directed" and "Approved"

- (1) The terms "directed" and "approved" in the Specification mean "directed by the Project Coordinator" and "approved by the Project Coordinator" except where the context clearly implies another meaning.

132 Abatement of Nuisance

- (1) The Contractor shall adopt such measures as the Project Coordinator may consider reasonable and necessary to minimise nuisance from dust, noise, or other cause. During periods of dry weather, roads in frequent use with heavy traffic shall be watered a minimum of 3 times a day at appropriate times to be agreed with the Project Coordinator. Other roads within the Site shall be watered at least once each day. The Contractor's attention is drawn to the damage to crops which may be caused by dust. The Contractor is to take such measures as may be necessary to prevent such damage by dust arising from the execution of the Contract.



- (2) The Contractor shall observe all agreements entered into by the Employer with any person or persons relating to occupation of the properties by the Employer and to the execution of the Works thereon. The Contractor will be given on request copies of any agreement or part thereof relating to such matters.
- (3) The Contractor shall prohibit the committing of nuisance on the site of the Works or upon the land of the Employer or adjacent landowners and any employee found violating this provision shall be liable to immediate dismissal and shall not again be reemployed on the Works.

133 Contractor 's Transport

- (1) The Contractor shall make his own arrangements for the transport, where necessary, of his staff and workmen to and from the site of the Works.




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APPENDIX 1

1.0 TERMS OF REFERENCE : UPDATING FEASIBILITY STUDIES AND PREPARE FINAL DESIGNS FOR UPGRADING OF THE COROZAL – SARTENEJA ROAD

2.0 TERMS OF REFERENCE: CONSTRUCTION SUPERVISION UNIT

3.0 TERMS OF REFERENCE: FOR UPDATING ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT



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1.0 Terms of Reference

UPDATING THE FEASIBILITY STUDIES AND TO PREPARE DETAILED DESIGNS FOR THE UPGRADING OF COROZAL-SARTENEJA ROAD

1. BACKGROUND

1.01 The country of Belize is the only official English-speaking country in Central America. With a population of 377,9681 and an area of approximately 2.3 million hectares, Belize has the lowest population density in Central America. The climate is tropical, very hot and humid, with a dry season running from February to May, a rainy season from May to November and a cool transitional period between November and February.

1.02 Belize's road network is divided into 603 km of arterial roads (mainly consisting of the Hummingbird, Southern, Philip S. W. Goldson and George Price (GP) Highways); 783 km of distributor roads; 2,160 km of feeder roads (also called Farm or Sugar Roads); and 970 km of village streets. Approximately 18% of the total network is paved, of which 65% is in good and 35% in fair condition. The road network includes a total of 313 bridges. Large sections of the road network are subject to flooding during the rainy season. This is as a result of the country's low-lying topography together with inadequate maintenance and rehabilitation works, limited land use planning and insufficient drainage infrastructure. Moreover, until recently, road designs have not taken into account the increasing impacts of natural hazards and climate change variability, as well as road safety.

1.03 The project area is located in the Corozal District, Northern Belize. Corozal lies on the Northern Coastal Plain that was once a seabed. The flat to undulating land of this area is covered with a thin layer of soil that supports scrub vegetation and dense hardwood tropical forest. The Corozal to Sarteneja road upgrading project will provide a bituminous surfaced, two-lane highway, between the Northern Highway, at the southern end of Corozal Town and the coastal community of Sarteneja, located 28 km to the east of Corozal Town on the shores of Chetumal Bay. The approximate length of the proposed highway is 43.2km (27 miles) and on completion, will provide a direct and all-weather link between Corozal Town on the Northern Highway and many of the communities to the east of the Progresso Lagoon - John Piles Creek - Laguna Seca waterway system, including the township of Sarteneja. Development of the proposed highway will require the upgrading of the existing unsealed road and the construction of two multi-span bridges. One of these bridges will replace the manually propelled vehicular ferry that currently provides access across the New River. The new highway will reduce by approximately 28km (17 miles), or 40%, the distance of the existing commute between Corozal and Sarteneja Towns and replace what is currently a sub-standard and difficult to maintain unsealed road. Centers of population that will directly benefit from the construction of this highway include those at Saltillo, Copper Bank, Progresso, Fireburn, Little Belize, Chunox and Sarteneja.

1.04 The road's junction with the Northern Highway lies within the boundary of Corozal Town. This seaside community has a population of approximately 9,000. The road moves in a southward


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1 Statistical Institute of Belize 2016 Mid-Year Estimate

direction along flat swampy land for approximately 6km to the Pueblo Nuevo ferry crossing the New River. Mangroves and jungle bound the New River. Beyond the ferry, the road continues southward between sugarcane fields and jungle for a distance of approximately 2kms. The road then turns west toward Saltillo where it intersects with the road to Progreso. East of the intersection the general terrain becomes slightly undulating and the surrounding vegetation is a mix of sugarcane and bush as far as Copper Bank. East of Copper Bank, which is a small fishing village, the road crosses Laguna Seca which is a relatively shallow lagoon that provides anchorage for the town's fishing fleet from time to time. East of Laguna Seca Ferry, the road leads south to Chunox for 3.5km and subsequently turns east for 26 km to meet Sarteneja. Vegetation on either side of the existing road alternates between jungle and sugarcane although as the road approaches Sarteneja and the Shipstern Native Reserve, the cover is predominantly jungle. North of the existing road is the proposed Warree Bight development. Between Chunox and Sarteneja, numerous borrow pits for the quarrying of marl have been developed for road construction and maintenance materials as well as for the provision of general fill material. Power reticulation to service Sarteneja has been installed on a power pole line that parallels the existing road. Jungle has been cleared for the construction of this line up to 10m from the edge of the road. In any case, any different and best alignment proposal shall be submitted by Contractor with its own research and assessment for Employer's approval by the Project Coordinator.

1.05 The two bridges to be constructed as part of the proposed new highway is subject to the contractor's design being approved by the Employer. In order to provide access across the river during construction of the bridge at Pueblo Nuevo, the existing ferry will need to be moved downstream of its current location. The design of the bridges must provide a navigable span for vessels using the waterway. This is particularly important for the Pueblo Nuevo Bridge crossing, as barges transport sugar from nearby processing facilities to Belize City via the New River.

1.06 The traditional occupations of the local population, which have included timber extraction, hunting, fishing and subsistence agriculture are either no longer sustainable or culturally acceptable and otherwise do little to stimulate growth in the local economy. The cultural fragmentation of the region, which in large part is due to the underdeveloped nature of the district's roading system, has discouraged development of locally based higher education facilities. Despite significant improvements in the standard of rural health care during the last 50 years, the sub-standard road network makes it difficult to access the more advanced regional health care facilities available in Corozal. The difficulties are particularly acute for those residents with continuing health care needs and for severely injured patients, whose transport across extended lengths of rough unsealed road may result in a deterioration of their physical condition. The cumulative effect of these situations has been to isolate communities within the project area from opportunities available elsewhere in Belize, and force new generations to enter either traditional, but non-sustainable occupations, or leave their native village to pursue economic opportunity elsewhere. The development of the proposed highway will provide substantial benefits not only to road users, but all of the communities within and adjacent to the project area, and to the nation of Belize as a whole. Corozal and the North of Belize are known as one of the 11 tourism and marketing units commonly recognized in Belize. The attractions of the area are characterized as turquoise bays, relaxed Mexican-Belizean ambience, Shipstern Nature Reserve, Mayan sites. Despite the apparent touristic attractions of the area, visitor numbers are relatively low. This project area part of Northern Belize is one of the friendliest, safest, least expensive and most



interesting areas of the entire country. Described as “The Sugar Coast”, it is considered a place to slow down, relax and enjoy at least a few days of easy living by the beautiful turquoise waters of Corozal Bay and the Bay of Chetumal. The climate is appealing, with less rain than almost anywhere else in Belize, fishing is excellent, and the sunny disposition of residents - Mestizos, creoles, Maya, Chinese, East Indians and North Americans - is infectious.

2. OBJECTIVE

2.01 The objective of this design consultancy is to update previous feasibility study and prepare preliminary and detailed designs to upgrade the Corozal – Sarteneja Road incorporating climate change, social inclusion and safety considerations. This will be achieved through the identification of climate change vulnerabilities, assessment of hydrological and hydraulic conditions, assessment of geometric alignment, identification of least-cost civil works, and the preparation of detailed designs to facilitate improved access between the eastern corridor of the Corozal District and the Philip Goldson Highway.

3. SCOPE OF WOR


3.01 The scope of services includes, but is not limited to:

(a) **Corridor Characterisation and Data Collection**

- (i) researching, collecting and analysing existing topographic, land use, hydrological, meteorological, geological, aerial imagery, and hazard event data and studies to characterise the corridor;
- (ii) determine existing and potential diverted traffic volumes on the road;
- (iii) principal hydrological attributes along the corridor should be defined;
- (iv) mapping of critical infrastructure and key land uses and economic activities along the corridor; and
- (v) site visits and field data collection for validation of existing topographic and socio-economic information, as required.

(b) **Stakeholder Consultations**

- (i) conducting consultative and participatory stakeholder meetings periodically at appropriate points of the Project with community leaders, community groups, residents, ministerial departments and agencies and any other relevant parties;
 - (aa) Facilitate two-way information sharing.
 - (bb) Enhance public understanding of the Project.
 - (cc) Set realistic stakeholder expectations of intended outcomes.
 - (dd) Receive stakeholders’ input to and feedback on proposed designs and implementation methodologies.


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- (ee) Support a grievance redress mechanism.
 - (ii) consultations should be undertaken with these entities regarding their perspectives, concerns, perceived current needs and priorities, as well as their input to and feedback on proposed designs and implementation.
- (c) **Feasibility Study/Design Report**

- (i) Cadastral and Topographical Surveys: The Consultant is required to conduct and complete all cadastral and topographic surveys for the road rehabilitation, particularly new alignments between miles 83 Philip Goldson Highway and Sarteneja Village. The topographic survey shall be carried out using WGS 84 Survey System. The survey will extend to the entire right of way and pick up all physical features and buried utilities as well as streams.

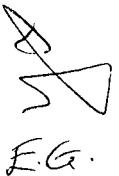
A Cadastral Survey will be done for the existing and proposed ROW for new alignments to identify any segments of the ROW that require acquisition of lands or easements, removal of structures or resettlement.

Original ground levels and detailed cross sections over the entire road reserve width shall be at a minimum of 20m intervals and at intermediate points where necessary. The cross sections shall be taken over the full existing or proposed ROW width and include measurements of the location and elevation of all necessary points of embankment and excavation slopes, road pavement and shoulders, junctions, roadside drainage, drainage structures, bridges, crossings, retaining walls, river training structures, safety features, road signs, utilities, trees, boundary fences and entrances to roadside properties, watercourses and any other feature that would affect the design of road rehabilitation or new construction.

The Consultant shall prepare Computer Aided Design (CAD) drawings and a digital terrain model of the completed ground survey of new alignments and submit in a format acceptable/and compatible with the MOW's CAD drawings. The survey data shall be recorded on plan-profile plans at a scale of 1:500 horizontally and 1:200 vertically. Road and waterway cross sections shall be drawn up at a scale of 1:200 or other scale that will allow for the precise description of the road elements.

The location, alignment, profile and cross section of all drainage system and waterways lying within existing or proposed ROW for new alignments shall also be surveyed and recorded.

- (ii) Carry out a traffic analysis, including axle load surveys, and prepare Equivalent Standard Axle (ESAs) projections to the year 2040 using a standard axle load of 9.0 ton. Consultant shall make necessary allowances to carry out axle load surveys, traffic counts and origin and destination surveys to prepare traffic volume projections and overall economic impact to the year 2040. Consultant required to also review development plans



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along the project route and assess their impact on future traffic volumes and overall economic impact.

(d) **Climate Vulnerability Assessment and Hydrological Modelling**

Identify and evaluate the potential effects of climate change on the road and the surrounding watersheds identify resilience measures to address the identified vulnerabilities. The consultant should undertake a quantitative analysis that includes the following:

- (i) Characterisation of relevant climate variables and establishment of climate baseline. The consultant is expected to apply hydrologic tools to describe the behaviour of the drainage systems along the corridor. The consultant will also define the hydraulic and hydrologic variables for road and drainage design, based on expected climate conditions by mid-century. Mid-century climate change scenarios should be used to define road and hydraulic structure design parameters. Climate variables could include temperature and precipitation changes (and for design purposes maximum 24-hour daily precipitation could be used as the basis for assessing the risk of floods from surface runoff); incidence of hurricanes and tropical storms. Both historical data and future scenarios will be required. The consultant will be expected to provide advice on the appropriate recurrence intervals for meteorological events impacting the proposed design of the infrastructure;
- (ii) Considering and factoring available historic precipitation data, climate model forecasts and scenarios assessed above, catchment surface area, topography, soil conditions, develop hydraulic and roadway design options for the upgrading of the road based on the climate change scenarios identified above, including various storm event scenarios (1-in-10, 20, 50, 100 and 150-year events);
- (iii) Using the predicted water levels and other criteria developed at (i) above, prepare a simple flood vulnerability map for the roadway, at minimum 1:5000 scale, or of a useful size relative to the study catchment, as determined with the Ministry of Works (MOW) and end-users, showing projected water levels for mid-century (2050) expected climate conditions identified above (and for return periods of 1-in-10, 20, 50, 100 and 150-year flood events), current development activities, critical infrastructure and population at risk in the flood zones; and
- (iv) Using this analysis, identify key vulnerable hotspots and potential climate adaptation measures for the road design.



(e) **Preliminary Design**

- (i) Based on hydrological modelling, taking account of potential climate

change impacts, and in consultation with MOW, recommend optimal options for upgrading the road, its drainage features and bridges. The Consultant must also demonstrate how climate change risk and associated capital costs considerations will alter the proposed design (i.e. the specific changes in design in order to take account of climate change);

- (ii) Preliminary design activities should include a Stage 1 and 2 road safety audits;
- (iii) Preparing cost and quantity estimates for MOW agreed preferred design. The Consultant should also perform a least-cost analysis and consult with MOW to determine the event horizon to be utilised in the design criteria.

(f) Environmental and Social Impact Assessment (ESIA)

Conducting an ESIA of the proposed works. The ESIA should involve broad stakeholder consultation as per item (b) above. It should include:

- (i) producing a sex-disaggregated demographic profile of communities along the corridor including socio-economic, individual and community characteristics including disability status, crime, gender-based violence, and health issues;
- (ii) identification of key employers and livelihood activities in the communities;
- (iii) identification of risks and vulnerabilities during implementation and operation, including those linked to projected climate change, in the following areas including inter alia: housing; economic activities; employment opportunities; livelihoods; labour force participation; shelter management; natural hazards; security and violence (including gender-based); education; health; transportation; cultural and archeologically heritage; wildlife habitat; and water, sanitation, and drainage;
- (iv) investigate gender-specific risks and vulnerabilities and gender-specific coping mechanisms, including those linked to projected climate change;
- (v) analysis of both qualitative and quantitative socio-economic benefits;
- (vi) prioritise community risks and vulnerabilities and community priorities for potential investments. Include within public consultations women and men equally as well as stakeholders representing the groups.
- (vii) Preparation of an Environmental and Social Management Plan (ESMP) including recommended mitigation measures, stakeholder engagement plan and grievance mechanisms;


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(g) Preparation of Detailed Designs

- (i) Based on the MOW agreed preferred option, prepare detailed designs for the works. The scope of work shall include, but not be limited to, the following main activities:
 - (aa) developing design criteria details for the carriageway, its geometry, drainage and structural elements;

- (bb) obtaining subsurface soils and topographical information;
- (cc) preparing designs of works to be incorporated into the Project;
- (dd) design activities should incorporate a Stage 2 road safety audit and in particular incorporate considerations for vulnerable road users (pedestrians, persons with disabilities, bicyclists, and motorcyclists), Non-Motorized Users (NMU), tactile surfaces and security features along the road and at bus shelters (Ranchito, Saltillo, Copper Bank, Chunox and Sarteneja);
- (ee) environmental, social and natural hazard management parameters, which are to be defined in the ESIA Study, shall be highlighted, identified and incorporated into the final designs;
- (ff) preparing construction specifications for all the works shown on the drawings for which the Consultant is responsible. The specifications shall be clear and concise with a statement setting forth the general scope of work, followed by a description of the various classes of work, under appropriate sections and headings. The quality control requirements required of the contractor, will be described in detail, including identifying standards or codes that are to apply;
- (gg) bidding documents will be prepared in accordance with MOW's standard bidding documents. These documents should be adapted to reflect the requirement to select a suitably experienced contractor with regards to Environmental, Social, Health and Safety (ESHS) worksite management, provide for comprehensive ESHS Specifications for worksites,
- (hh) providing the client with an engineer's priced cost estimate based on the final design. This should indicate the anticipated division between local and foreign costs, and identify the incremental costs associated with climate adaption; and
- (ii) submitting the construction drawings, plans and specifications, for approval to the client and the appropriate authorities, as required. Attend meetings at the offices of the Ministry of Works, Government of Belize (GOBZ) and other Agencies as may be required by the Client to discuss the designs and provide explanations for the purpose of furthering approvals.


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4. IMPLEMENTATION ARRANGEMENTS


4.01 MOW will appoint a Project Coordinator (PC). PC will facilitate the work of the

Consultants and make available a copy of the feasibility study done in 2000, vehicle weight study done in 2013 and data relevant to the completion of the exercise and will act as liaison between the consultants and GOBZ officials and stakeholders.

5. QUALIFICATIONS AND EXPERIENCE

5.01 The consulting team should consist of the following key experts:

- (a) **Key Expert 1: Team Leader/Highway Engineer** with preferably ten (10) years' experience of carrying out feasibility studies, detailed design, conducting road safety audits, and in the preparation of procurement documents for road projects. The Highway Engineer shall have as a minimum a Bachelor's degree with professional qualifications. The candidate must have performed the function of Team Leader on at least two (2) similar projects within the past five (5) years;
- (b) **Key Expert 2: Drainage Engineer/Hydrologist** with preferably seven (7) years' experience of carrying out hydrological modelling of drainage basins, preparation of feasibility studies and the detailed hydraulic design of bridges, roadside drainage structures and river training works. The Drainage Engineer shall have as a minimum a Bachelor's degree with professional qualifications;
- (c) **Key Expert 3: Structural/Bridge Engineer** with preferably ten (10) years' experience of carrying out the structural design of bridges, drainage structures, and river defence infrastructure. The Structural Engineer shall preferably have a Master's degree with professional qualifications.
- (d) **Key Expert 4: Geotechnical Engineer** with preferably ten (10) years' experience, in road design and road construction with five (5) years of experience in countries similar to Belize, Caribbean Region or other Developing Region. The Geotechnical Engineer would require a BSc. in Civil Engineering with a Master's Degree in Geotechnical Engineering with professional qualifications.
- (e) **Key Expert 6: Environmental Specialist** with preferably seven (7) years' experience of carrying out environmental impact assessments, climate change impact assessments, and the development of Environmental Management Plans for road projects. The Environmental Specialist shall preferably have a Master's Degree in Environmental Sciences, Environmental Engineering, Environmental Management or related discipline, experience in disaster risk mitigation and in carrying out environmental impact assessments in accordance with the policy, guidelines and requirements of the Belize Department of the Environment and Laws of Belize;
- (f) **Key Expert 7: Social Specialist** with preferably seven (7) years' experience of carrying out social and gender impact assessments of transport infrastructure projects. The Social and Gender Impact Specialist shall preferably have a Master's Degree in Social Sciences, Gender Studies or related discipline, experience in


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gender analysis, experience utilising participatory approaches to perform social and gender analysis, and experience in preparing associated social impact assessments in accordance with the policy, guidelines and requirements of the Belize Department of the Environment and Laws of Belize;

It is the consultant's responsibility to ensure that their team has an appropriate mix of key and non-key experts required to satisfy the requirements of the TOR.

6. DURATION - OUTPUTS/DELIVERABLES

Deliverables of the study shall be presented as follows:

- **Inception Report.** This should include an organizational structure of the main contractor OECC, a working plan with a detailed schedule of activities and a description of the working methodology to be followed during the design and construction phases.. It shall be submitted to the MOW four (4) weeks after the commencement date of the contract.
- **A Topographical, Cadastral and Engineering Report.** This report along with drawings will include a digital terrain model of the Right of Way (ROW) over the length of the project route. This should provide all cadastral and topographic surveys for the road rehabilitation, particularly new alignments. The survey will extend to the entire ROW and pick up all physical features and buried utilities and tie in to the national survey grid. A Cadastral Survey will be done for the existing and proposed ROW for new alignments to identify any segments of the ROW that require acquisition of lands or easements, removal of structures or resettlement. This report shall be delivered sixteen (16) weeks after contract signing.
- **Geotechnical Survey and Road Assessment.** This should provide the identification and assessment of sufficient geotechnical data for the entire route along with sources of materials, as well as a diagnosis of the existing road. This report shall be delivered Sixteen (16) weeks after contract signing.
- **Climate Vulnerability Assessment Report:** It should briefly include the description of site, climate change scenarios, hydraulic modelling, and the vulnerability analysis. It should include an analysis of drainage, hydraulic structures and roadway design options for the upgrading of the road based on various event scenarios. This report shall be delivered twenty (20) weeks after contract signing.
- **Full Design and Technical Feasibility Report including raw data handover.** This will incorporate the above reports with a full description of all alternatives and present the preferred project alternative to the GOB, specifically the MOW. Together with the feasibility report all intermediate and final data created during this consultancy shall be handed over. This includes but is not limited to: (i) all CAD drawings, (ii) topographic and bathymetric data, (iii) integrate the information on the roadway and bridges that has been collected throughout the project into the transport infrastructure database of the MOW, (iv) any calculations such as the cost-benefit analyses (.xlsx), hydrological and hydraulic


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assessments, (v) any remote sensing data that is obtained, (vi) etc. The report and the data shall be delivered twenty-five (25) weeks after contract signing.

- **Preliminary Design Reports:** the draft Preliminary Design Report should consist of a preliminary design, cost and quantity estimates for the preferred option after consultations with MOW. The report and the data shall be delivered thirty (30) weeks after contract signing.
- **ESIA Report:** the draft report shall be submitted for prior review by Department of Environment and the National Environmental and Appraisal Committee. The draft ESIA report and the data shall be delivered thirty-four (34) weeks after contract signing. The MOW shall be permitted four weeks to review and the Consultant shall address the MOW comments in the final report and re-submit within four (4) weeks thereafter.
- **Final Design Report:** the draft Final Design Report should consist of agreed detailed designs, revised cost and quantity estimates and bidding documents. The draft final design report shall be delivered forty (40) weeks after contract signing. The MOW shall be permitted four weeks to review and the Consultant shall address the MOW comments in the final report and re-submit within four (4) weeks thereafter.

Comments on the above-mentioned Reports/Deliverables should be anticipated within four weeks of receipt with the exception of the ESIA Report which will require at least seven (7) weeks to complete the national review process by the National Environmental Appraisal Committee (NEAC). The Consultants shall revise the draft reports within one month of receipt and in accordance with the comments received from the Ministry of Works. Reports shall be submitted in English in Word Format (Font size 12) and all Drawings to be submitted in .DWG format in three hard copies and electronically.



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6.01 Each deliverable produced by the consultant must contain a visibility statement acknowledging that the technical assistance has been provided by The Republic of China (Taiwan) inclusive of Country logo.

2.0 TERMS OF REFERENCE
CONSTRUCTION SUPERVISION SERVICES TO BE PROVIDED
BY THE PROJECT EXECUTION UNIT
(COROZAL – SARTENEJA ROAD UPGRADE)

1. BACKGROUND

1.01 The Corozal – Sarteneja Road is currently considered a distributor road and provides an alternative link for vehicles travelling between Corozal and Sarteneja Village. The 43.2 km gravel road connects the Philip Goldson at mile 83 (near Entrance to Tony’s Resort) to the project area is located in the Corozal District, Northern Belize. Corozal lies on the Northern Coastal Plain that was once a seabed. The flat to undulating land of this area is covered with a thin layer of soil that supports scrub vegetation and dense hardwood tropical forest. The Corozal to Sarteneja road upgrading project will provide a bituminous surfaced, two-lane highway, between the Northern Highway, at the southern end of Corozal Town and the coastal community of Sarteneja, located 28 km to the east of Corozal Town on the shores of Chetumal Bay. The approximate length of the proposed highway is 43.2km (27 miles) and on completion, will provide a direct and all-weather link between Corozal Town on the Northern Highway and many of the communities to the east of the Progreso Lagoon - John Piles Creek - Laguna Seca waterway system, including the township of Sarteneja. Development of the proposed highway will require the upgrading of the existing unsealed road and the construction of two multi-span bridges. One of these bridges will replace the manually propelled vehicular ferry that currently provides access across the New River. The new highway will reduce by approximately 28km (17 miles), or 40%, the distance of the existing commute between Corozal and Sarteneja Towns and replace what is currently a sub-standard and difficult to maintain unsealed road. Centers of population that will directly benefit from the construction of this highway include those at Saltillo, Copper Bank, Progreso, Fireburn, Little Belize, Chunox and Sarteneja.

There are two ferries namely Pueblo Nuevo and Laguna Seca, on the proposed route between Corozal and Sarteneja which are to be replaced with Composite Bridge type structures. A feasibility study completed in 2000 (to be updated under the current project by OECC), identified that upgrading the road would generate significant economic benefits associated with reduced travel times and the opening up of new opportunities for agricultural and tourism developments.

2. OBJECTIVE

2.01 The objective of this consultancy is to assist the Government of Belize (GOBZ) with project management of the road works, inclusive of contractor supervision and contract administration throughout the project implementation process, inclusive of the defects liability period. The consultancy would also be responsible for post-construction reporting.

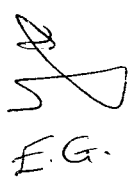
3. SCOPE OF WORK

3.01 The Project Coordinator shall be solely responsible for the effectiveness of contractor supervision and timely completion of reports;.

3.02 The tasks will include, but not be limited to:


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- (a) assisting GOBZ during the design phase of the works. This includes conducting site visits with the Contractor and responding [through the Ministry of Works (MOW)] to queries raised by the Contractor, evaluating and reviewing reports and the final design of the roads and two bridges.
- (b) carrying out the supervision services related to the construction of Corozal - Sarteneja Road Upgrading Project which consists of; the upgrading of approximately 43.2 km (27) miles of existing gravel road between Corozal Town and Sarteneja Village. The road connects the Philip Goldson Highway near Mile 83 and the Coastal Village of Sarteneja. The project also includes upgrading the drainage system by constructing new higher capacity culverts. Construction of two existing bridges including associated abutments, piers, decking, approach roads and embankments. The construction phase is proposed to be completed in at least three sections with Belizean Subcontractors.
- (c) assigning an experienced Project Engineer, acceptable to the MOW, together with the necessary site staff as shall be approved in writing by the Employer. The Project Engineer will be responsible for reporting directly to, and coordinating with, the Project Coordinator, MOW;
- (d) representing the interest of GOBZ *vis-à-vis* the Design /Build Contractor in any matter related to the construction contract and the proper execution thereof;
- (e) verifying all necessary ground and topographic controls for the establishment of road alignments and grades including work area limits for quarries, haul roads, etc.;
- (f) reviewing and recommending for approval, the Contractor's work schedule or revisions thereto including a critical path diagram for the construction of the Project and any such plans or programmes that the Contractor is obliged to furnish for the Project Coordinator's approval. The contractor (s) shall also prepare an initial disbursement schedule based on the approved work schedule;
- (g) assessing the adequacy of all inputs such as materials and labour provided by the Contractor and his methods of work in relation to the required rate of progress and, when required, take appropriate action in order to expedite progress. The Project Coordinator shall also keep and regularly update a list of the Contractor's equipment (and its condition) to ensure compliance with the list of equipment which the Contractor pledged in his bid;
- (h) inspecting and evaluating all Contractor installations, housing, shops and warehouses, and other accommodations to ensure compliance with the terms and conditions of contract documents;
- (i) examining and making recommendations on all claims from the Contractor for time extension, extra compensations, work or expenses, or other similar matters;
- (j) negotiating new rates with the Contractor for additional work and making requisite recommendations for approval, should the rates set out in the contract not be applicable




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- (k) Certifying work done on a monthly basis including monthly cost of supervision for payment and determining the amount to be added to, or deducted from, payments to the Contractor for any additional work or work omitted;
- (l) Computing quantities of approved and accepted work and materials and checking and certifying the Contractor's monthly and final payment certificates. The Project Coordinator shall also maintain up-to-date records of remaining quantities to be incorporated in the work, and the cost estimates relating thereto, broken down into local and foreign components;
- (m) Arranging the execution of works related to the provisional sums in the construction contract and determining the value of such works within the scope of the said contract;
- (n) reporting periodically on the progress of works, the Contractor's performance, quality of works and the Project's financial status and forecasts. Periodic reports shall be prepared and transmitted to the Ministry showing quantities incorporated in the work at the end of each pay period, and also showing monies earned by and due to the contractor(s);
- (o) proposing and presenting for approval any changes in the plans deemed necessary for the completion of works including information or any effect the changes may have on the contract amount and the time of completion of the Project, and prepare all necessary Variation Orders including altering plans and specifications and other details. Inform the employer of problems or potential problems which might arise in connection with any construction contract and make recommendations for possible solutions;
- (p) maintaining an approved representative at the site during all times the Contractor is working, to supervise the work and to issue instructions, as required;
- (q) furnishing timely assistance and direction to contractors in all matters related to interpretation of the contract documents, ground survey controls, quality control testing, and other matters relating to contract and progress of the Project;
- (r) organising the supervision of the works with proper allocation of responsibilities to the individual inspectors and supervise their work in order to ensure that it is effectively executed;
- (s) compiling systematic records of the inspector's findings and what actions have been implemented as a result thereof;
- (t) preparing and maintaining inspection and engineering reports and records to adequately document the progress and performance of the works;
- (u) reviewing all Contractor's working drawings, shop drawings, erection drawings, and drawings for temporary works, and act as appropriate thereon;
- (v) performing verification surveys of the Contractor's initial stake-out surveys for centreline alignment, structures location surveys and vertical control bench marks; performing initial cross-section and periodic and final survey measurements of completed and accepted works or partial works to determine quantities; and performing settlement control;


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- (w) ensuring the receipt of, and maintaining as permanent records, all warranties required under terms of the contract documents for materials and equipment accepted and incorporated in the Project. All local materials incorporated in the Project, and their source, are also to be recommended for approval. Ensure that Contractor as-built drawings shall be prepared for all works as the work progresses;
- (x) The Project Coordinator shall take the necessary steps to oversee that all test samplings are carried out in the field and perform such tests as can be made in the field laboratory arranged by the Contractor, to maintain quality control based on the specified standards. The Project Coordinator shall be responsible to verify all testing and shall notify the contractor(s) of any defects in his work and stop operations connected with the defective works until the defects are rectified;
- (y) inspecting the safety and environmental protection aspects of construction works and methods to ensure that every reasonable measure has been taken to protect life, environment and property, and ensure that traffic circulation and proper detours are provided by the Contractor at all times;
- (z) participating in an inspection of the works, made jointly by representatives of MOW and the Contractor, upon 97% completion of the works and following a written request of the Contractor. Should the works prove to be substantially complete, the Project Coordinator shall assist in preparing the Certificate of Substantial Completion to be signed by the members of the inspection team. Should the works not be acceptable, the Contractor shall be informed in writing of the items that need to be rectified;
- (aa) when in the opinion of the inspection team, works are considered substantially complete but there remain outstanding works to be completed by the Contractor, the Project Coordinator shall ensure that the Contractor signs a Certificate of Outstanding Work, before the Recommendation of Substantial Completion becomes effective;
- (bb) performing any and all other items of works not specifically mentioned above, but which are necessary and essential to successfully supervise and control the construction activities in accordance with the plans, specifications and terms of contract. The Project Coordinator's responsibility for the site supervision of the works shall continue until the Contractor has completed all outstanding works to the satisfaction of MOW; and
- (cc) carrying out the necessary inspection, specifying and supervising any remedial works to be carried out as well as participating in the final inspection and preparing the Recommendation of Final Acceptance with its effective date, to be signed by all members of the inspecting team.


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4. REPORTING REQUIREMENTS AND DELIVERABLES

- 4.01 The Contractor (s) shall provide the following documents and reports to the Project Coordinator and the Chief Engineer, MOW:
 - (a) **Progress Reports:** By the tenth (10th) day of each month submit 6 copies of a Monthly Progress Report in the approved form, briefly and concisely describing all construction activities and progress for the previous month, and report on environmental monitoring during construction. Problems encountered, or problems anticipated, shall be clearly stated, together with steps taken or recommendations for their correction. These reports

shall also list the Contractor's equipment and work force disaggregated by sex and age. It will also indicate the work to be performed during the coming month, expenditure record, provide quality cost projections to the end of the project and current estimates of final cost and completion date.

- (b) **Final Report:** Within 2 months of the issue of the certificate of practical completion, prepare a Final Report on construction of the Project, summarising the construction activities, contract changes, claims or disputes or any other substantive matters having an effect on the amount, cost and progress of the work. The number of copies of this report will be 12.
- (c) **As-Built Drawings and Site Documents:** Within one month of the issue of the certificate of practical completion provide the Chief Engineer, MOW with one full size set (Arch D size) of 'as-built' reproducible plans on stable-base material showing final details of the Project as completed, together with all data, records, field books etc., properly indexed and catalogued.

4.02 Comments on the Reports should be anticipated within four weeks of receipt and the Project Coordinator will adjust the reports according to the comments received. The consultant will revise the draft reports within one month of receipt and in accordance with the comments received.

5. IMPLEMENTATION ARRANGEMENTS

5.01 The MOW will appoint a Project Coordinator (PC). The PC will facilitate the work of the contractor (s) and make available all relevant studies, reports and data, relevant to the completion of the exercise and will act as liaison between the contractor (s), GOBZ officials, and stakeholders.

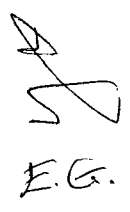
6. QUALIFICATIONS AND EXPERIENCE

6.01 The consulting team should consist of persons having the appropriate professional and academic qualifications and a minimum of 10 years relevant experience in the areas of transportation engineering, structural/bridge engineering, environmental specialization, social specialisation, and construction supervision. Post Graduate qualifications in the required fields as well as specific experience in the Caribbean will be an asset.

6.02 It is the consultant's responsibility to ensure that their team has an appropriate mix of key and non-key experts to satisfy the requirement of the TOR.


7. DURATION

7.01 The planned completion period for the design and construction works is 54 months and this shall include a Defects Liability period of 12 calendar months. The Project Coordinator shall also be required to assist the MOW and GOBZ with review of all designs and Reports the Contractor is required to produce under the provision of the Contract.



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TERMS OF REFERENCE
FOR
ENVIRONMENTAL AND SOCIAL IMPACT STUDY



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TERMS OF REFERENCE

FOR AN ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT TO BE CONDUCTED FOR THE UPGRADING OF THE COROZAL - SARTENEJA ROAD AND CONSTRUCTION OF THE PUEBLO NUEVO AND LAGUNA SECA BRIDGES, COROZAL DISTRICT

Background

This Terms of Reference (TOR) has been prepared pursuant to the EIA Regulations of 1995, and its 2007 Amendment. The TOR has been prepared following scoping of the most critical issues associated with the proposed rehabilitation of the Corozal – Sarteneja Road and the construction of 2 bridges; one at Pueblo Viejo and one at Laguna Seca.

The TOR has been divided into five (5) areas, which are as follows:

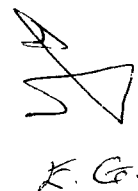
- A. **Baseline information of the project area, project description of the road and infrastructural improvements**
- B. **Policy and legal framework**
- C. **Environmental and socio-economic settings,**
- D. **Environmental and social impact assessment, potential cumulative impacts, assessment of alternatives,**
- E. **Mitigation and monitoring (Environmental and social management plan-ESMP), Conclusion/recommendations**

TERMS OF REFERENCE

The most critical issues that this proposed development and its related activities will focus on, should include the following:

- I. Potential impact to hydrology features, flooding impacts, drainage, and surface impacts;
- II. Potential impact on water quality;
- III. Potential pollution impacts associated with road and bridge construction, road upgrade and storage area for construction material, heavy machinery, and fuel;
- IV. Waste (liquid, solid, and hazardous) management issues and their potential impacts;
- V. Impacts associated with relocation of utilities (electricity and water);
- VI. Impacts associated with noise pollution, air quality and soil quality;
- VII. Impacts on the biological corridor and protected areas;
- VIII. Transportation and traffic related impacts;
- IX. Potential impacts associated with mineral extraction for source material;
- X. Socio-economic impacts.

Scoping of these issues speeds up the Environmental Impact Assessment (EIA) process, cuts down its cost, improves the quality of the development and ensures that the environmental concerns are clearly addressed.



F. G.

A. THE BASELINE INFORMATION

This section of the document deals primarily with information pertaining to the background of the project and the physical road and infrastructure conditions within which it is proposed, and upon which is likely to have an impact.

1. PROJECT DESCRIPTION AND ROAD AND INFRASTRUCTURE CONDITIONS

Provide a detailed description of the project and provide legible maps at appropriate scales with proper labels and legends to illustrate the general settings of the project relative to the development sites, as well as the surrounding areas that are likely to be impacted by the development. These maps shall include topographic contours, the position of conservation areas, political boundaries, geological and land use profiles, existing adjacent land use (tourism, residential, agriculture, industrial, etc.), as well as any zoning scheme that may be in existence, or proposed otherwise for the area and geomorphic features of the project area (by use of aerial photographs, if available.) Additionally, the following should be provided:

- 1.1. Provide a scaled map depicting the exact alignment of roads and river crossings, including coordinates (UTM Coordinates) of the proposed development relative to surrounding communities within the project area and zone of influence. Illustrate all major exit/entrance to the highway, particularly in populated areas;
- 1.2. Provide a description of the present road and infrastructure conditions including assessment of bridges, drainage, road embankment and road safety. The assessment must be conducted using an internationally accepted methodology and approved by the Ministry of Works. A description of the methodology used to conduct this assessment should be provided.
- 1.3. Provide engineering designs, as well as materials to be used for the construction of the road surface, structures/bridges, embankment stabilization. Identify the potential impacts associated with the preferred choice of surfacing and their mitigation measures, and with the preferred location of road materials to be extracted for this purpose.
- 1.4. Describe the construction of bridges and box culverts, flood relief channels (if any), roads, relocation of overhead power lines and potential removal/ relocation of buildings. Include schematics, where available.
- 1.5. Provide justification(s) for the proposed project including possible alternatives in the comparative form, exploring each alternative, including the no- action alternative;
- 1.6. Describe the timeline for the implementation of the project.
- 1.7. Determine the type and volume of construction materials required for the entire development, including material for road construction, infrastructure needs, etc.

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B. POLICY AND LEGAL FRAMEWORK

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

This section will identify operation standards, which the project must address to be environmentally acceptable. This will include, for example earth works, land acquisition, permissible noise levels, paving of the road and occupational health and safety requirements effluent discharge limitations, air emission standards, effluent receiving water quality standards, construction codes, and occupational health and safety requirements.

- 2.1. Provide and discuss policy, legal or administrative issues as they relate to this proposed development. This should include the pertinent regulations, standards and policies, at the local, national and international levels. Legislation and policies that relate to the proposed project which governs environmental quality, health and safety, protection of sensitive areas, including cultural resources, protection of endangered or threatened species, infrastructure development, land use control, and tourism that may have an impact on the proposed development.

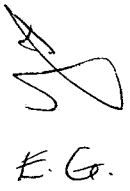
C. ENVIRONMENTAL AND SOCIO-ECONOMIC SETTINGS

3. PHYSICAL AND BIOLOGICAL ENVIRONMENT

Provide details of the basic physical environment of the proposed project site and zone of influence.

This should include:

- 3.1. General Geology: Geomorphology- description of characteristic of landform, land surface including exposed rock types, types of unconsolidated materials exposed (sediments) rivers, tributaries, ridges, valleys and geological structures-faults, folds if they can be determined by field mapping;
- 3.2. Subsurface geology- detailed description of the stratigraphy of the rocks or unconsolidated materials within the project site, particularly at bridge abutments. This must be done by core sampling (mechanical or manual). A cross section of the rock types and unconsolidated materials should be presented.
- 3.3. Topography: An elevation map of the project site including the flood hazard and drainage patterns around the project site.
- 3.4. Include a map outlining the boundaries of zone of influence in relation to road corridor. Provide a map that shows clearly the areas in the entire Coastal Road that are likely to be flooded and are at risk from rain induced floods.
- 3.5. Climate, hydrology, and meteorology: Provide an overview of the climate, hydrology and meteorology of the area including average rainfall per year, and prevailing winds. Identify areas prone to flooding and outline measures being implemented to address flood effects.



A handwritten signature, possibly 'E.G.', is located on the right side of the page, next to the text 'Provide details of the basic physical environment...'. The signature is written in dark ink and appears to be a stylized name.

- 3.6. Provide a description of the surrounding natural (ecological) environment that can be affected by the project, including major surface water bodies as well as riparian vegetation to be impacted.
- 3.7. Water Quality: provide baseline data on the current water quality of the New River and of Laguna Seca. Parameters to be tested for should include the following: pH, Dissolved Oxygen, Total Nitrates, Total Phosphates, Total Suspended Solids, Total Dissolved Solids, Total Hardness, Fecal Coliform and E. Coli; Provide description of methodologies, date and time of collection and equipment used for collections of water quality baseline data. Collect at minimum of 2 samples from each water source and collected immediately downstream from the activity.
- 3.8. Climate Change: Assess the vulnerability of the project area to flooding, hurricanes, storm surges, sea level rise, temperature and precipitation changes. Identify the natural hazards that are specific to the project area, frequency they occur, and with what intensity; a description of all elements at risk (road, communities etc.)
- 3.9. Provide baseline data (field study) on the present ecosystems, flora and fauna (terrestrial and aquatic) along the proposed road alignment. This should pay attention to sensitive habitats, biological corridors, protected areas, commercial species and endangered species. This should incorporate clear indicators of percent cover and habitat composition and health. Illustrate with legible maps at an appropriate scale. Describe the scientific methodology used for the assessment, include date and time surveys were conducted. If clearing of vegetation is required, estimate the type and acreage. Identify whether land clearing may affect the ecology of the area; for example habitat, food and nutrient supplies, breeding areas, migration routes and changes in herbivore grazing patterns. Determine whether these are short, medium or long term.
- 3.10. Current land use management regimes of project site and immediate surrounding lands, including existing feeder roads and building infrastructure.


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4. SOCIAL ENVIRONMENT

Provide a description of the socio-economic environment including information to demographics, land use, education level, health, income, means of transportation, social characteristics, traffic patterns, types of businesses that may be affected, identification of lots and necessary relocation due to construction, infrastructure services that may be affected including drainage, utilities including telephones, electricity etc.

- 4.1. Consult and report on the views and concerns of directly affected stakeholders such as nearby communities, local NGOs and CBOs, Management Organizations and relevant government departments/agencies to identify their economic, environmental and social concerns about the proposed activities. Provide a summary of the views of those interviewed and include the name and organization of all the interviewees and the date of the interview. The methodology (including questions and answers) should be provided within the EIA.


- 4.2. Inventory and evaluation of public and private infrastructure and buildings in the areas of direct influence during construction and operation, together with the need for land acquisition with a view to:
 - i) Establish a baseline to address any future damages or related claims;
 - ii) Identify vulnerabilities and corresponding prevention, monitoring and mitigation measures; and
 - iii) Design operating procedures and monitoring requirements.
- 4.3. Consult with NICH-Institute of Archaeology on the project area to determine any known features of archaeological or cultural importance and provide recommendations for the protection of any features as well as provide mitigation plans. Ensure that formal response from the Institute of Archeology is annexed.

D. ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT


This section of the EIA presents the assessment of the potential environmental and social impacts associated with the proposed road rehabilitation project. For each relevant environmental and social parameter, the potential impacts should be discussed these include air and water quality; soil erosion and soil stability, and the hydrology and drainage of the area as well as nearby or adjacent ecosystems within the project, impact the lives of residents of communities and road users.

5. ENVIRONMENTAL IMPACT ASSESSMENT

- 5.1. Identify the impacts of the project on the drainage, hydrology of the area and the impacts of flooding on the proposed project, during construction and operational phase. Based on the findings identify and provide respective mitigation measures.
- 5.2. Identify potential impacts, such as road and bridge abutment erosion, and mitigation measures for these activities. These mitigation measures must also include recommendations for protection measures against siltation (if applicable), and other potential pollution to the environment during construction activities
- 5.3. Identify the potential impacts on natural habitats, including the biological corridor from general road construction activities and the operational phase of the highway. Identify mitigation measures to reduce the impacts on wildlife.
- 5.4. Identify the potential impacts associated with road and bridge construction, at the site of construction as well as the storage area for construction material and areas identified for mineral extraction, heavy machinery, and fuel. Issues should include hazardous, solid and liquid waste, and the storage of hazardous materials. Identify mitigation measures to minimize the potential impacts.
- 5.5. Illustrate on a suitably scaled map, the location of all water body crossings and low-lying areas. For low-lying areas, where applicable, indicate the siting of culverts.


E.G.

- 5.6. Identify the potential impacts on the air quality. Issues to be covered include impacts from noise and dust from construction activity, dust from transport and stockpile of materials and fumes emission from the operation of heavy equipment, etc. by mobile and static sources during construction and operation phases. Based on the findings identify and provide respective mitigation measures to be adopted to reduce air quality impacts, especially in consideration to any nearby by communities and schools along the right of way.
- 5.7. Identify the potential impacts related to the adjustment of the vertical and horizontal alignment of the highway including the disposal of spoils (material removed from the existing road). Provide mitigation measures to minimize the impacts
- 5.8. Identify and evaluate at minimum three (3) options for meeting the need for fill materials such as limestone marl and gravel, reviewing their sources, volume, extraction methods and transportation and identifying:
 - Direct and indirect biological impacts;
 - Direct and indirect physical impacts;
 - Impact on water resources;
- 5.9. Identify the preferred option for the extraction methods, source and transportation of materials, specifying the necessary mitigation measures, their residual impacts and significance.
- 5.10. Provide general information on disaster risk management (including climate change) as it relates to road constructions.
- 5.11. Identify emergency preparation measures for the proposed development (e.g. hurricane, floods, etc.). This should include road and bridge closure, detours and hazard management plans in conjunction with:
 - 5.1.1.1 Human and health safety,
 - 5.1.1.2 Spillage of fuel, oil, gas, chemicals and hazardous materials,
 - 5.1.1.3 Natural Disasters and their implications on operations.


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6. SOCIAL IMPACT ASSESSMENT

- 6.1. Identify the potential socio-economic impacts such as employment, livelihoods, income generating activities, health etc. on the communities along the project area.
- 6.2. Transportation and traffic related impacts and mitigation measures.
- 6.3. Impacts associated with relocation of utilities (electricity and water); and mitigation measures.

7. POTENTIAL CUMULATIVE IMPACTS

- 7.1. This section of the document primarily targets the potential cumulative impacts of critical concerns based on information provided in previous sections and relates to

the impact of the processing activities on various environmental variables, ecosystem functions, and economic activities. Identify all potential cumulative impacts and significant changes that may result from the implementation of this overall project, taking each individual component into consideration.

8. ASSESSMENT OF ALTERNATIVES

This section proposes alternatives to the execution of the project based on the information generated by section A.


8.1. Present all reasonable alternatives for the development in comparative form, exploring each alternative. This includes the no-action alternative, and the reason why certain alternatives were recommended or eliminated. These alternatives should look at the following components:

- 8.1.1. need to resurface road sections,
- 8.1.2. rehabilitation or replacement of existing bridges and culverts and associated low lying road sections;
- 8.1.3. proposed road junctions
- 8.1.4. need for adjustments of the horizontal and/or vertical road alignment

E. MITIGATION AND MONITORING (ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN-ESMP), CONCLUSIONS AND RECOMMENDATIONS

9. MITIGATION AND MONITORING

- 9.1. Based on assessments from section D, develop a mitigation and monitoring plan, this should include all potential negative Environmental Impacts, including, but not limited to: construction activities and road upgrade, water quality, ambient air quality, and identified Social and environmental Impacts
- 9.2. Develop an Environmental and Social Management plan based on the mitigation measures discussed in 8.0 above.
- 9.3. Conclusions and recommendations


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Outline for the EIA Report

COVER PAGE

Include a single page listing the title of the proposed project and its location; the name, address, and telephone number of a contact person; date and a designation of the report as "Draft" or "Final".

EXECUTIVE SUMMARY

Provide a concise summary of the EIA report, preferably not exceeding 8 pages in length, highlighting the scope of the project, the major environmental issues identified, proposed mitigation measures and recommendations/conclusions.


TABLE OF CONTENTS

Provide a list and page number index of the Chapters, Sections and Subsections in the EIA Report, including a list of Tables, Figures and Appendices.

CHAPTERS OF THE EIA REPORT

The chapters to follow the same format as listed in the Terms of Reference
Provide the following as annexes of the EIA report:

- I. Approved copy of TOR
- II. List of Preparers including CVs
- III. Water quality analysis results
- IV. Field data collected
- V. Any other important documents related to the development


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