THE GOVERNMENT OF PAPUA NEW GUINEA

THE DETAILED DESIGN
ON
ROAD CONSTRUCTION PROJECT
IN
BEREINA - MALALAUA

TENDER DOCUMENTS

(Volume I)

JANUARY 1990

JAPAN INTERNATIONAL COOPERATION AGENCY



SSF 90 - 003

PAPUA NEW GUINEA



TRANS-ISLAND HIGHWAY BEREINA TO MALALAUA ROAD CONSTRUCTION PROJECT CENTRAL/GULF PROVINCES

TENDER DOCUMENTS

FOR

LOT I : BEREINA TO MIARU RIVER SECTION CONTRACT NO. SC 120-33-814/A
CH 0+000 TO CH 33+500

LOT I : MIARU RIVER TO MALALAUA SECTION
CONTRACT NO. SC 120-33/814/B
CH 33+500 TO CH 80+596

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VOLUME I

INSTRUCTIONS TO TENDERES
APPENDIX TO INSTRUCTIONS TO TENDERERS
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FORM OF TENDER SECURITY (BOND)
FORM OF PERFORMANCE SECURITY (BOND)
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FORM OF AGREEMENT
FORM OF CERTIFICATE FOR SOURCE, ORIGIN AND ELIGIBILITY
CONDITIONS OF CONTRACT
PART I GENERAL CONDITIONS
PART II CONDITIONS OF PARTICULAR APPLICATION

国際協力事業団 20959

TRANS-ISLAND HIGHWAY

BEREINA TO MALALAUA ROAD CONSTRUCTION PROJECT CENTRAL/GULF PROVINCES

TENDER DOCUMENTS (LOT I AND LOT II)

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INVITATION TO TENDER

(This letter will be issued to Applicants to the tender together with delivery of the Tender Documents.)

REF NO:

To:

(Name of Tenderer)

(Address of Tenderer)

Re: Invitation to Tender

Trans-Island Highway
Bereina to Malalaua Road
Construction Project
Central/Gulf Provinces

Contracts No. SC 120-33-814/A (Lot I) and SC 120-33-814/B (Lot II)

Dear Sir,

In response to your application for Tender Documents for the Bereina to Malalaua Road Construction Project, the Papua New Guinea Department of Works hereby invites you to submit a sealed Tender(s) for either Lot I or Lot II or for a combination of Lot I and Lot II. This is a Unit Price Remeasurement Contract with a priced Bill of Quantities.

You may tender for either Lot I individually, or Lot II individually, or for a combined package of Lot I and Lot II; but in the latter case, a separate tender for Lot I and Lot II individually should also be submitted. Only prequalified tenderers are allowed to tender, either alone or as a member of a joint venture or consortium.

The Tender Documents consist of the following volumes:

- (a) Volume I (Lot I and Lot II)
 - Instructions to Tenderers
 - Appendix to Instructions to Tenderers
 - Form of Tender Security (Bank Guarantee)
 - Form of Tender Security (Bond)
 - Form of Performance Security (Bond)
 - Form of Bank Guarantee for Advance Payment
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Tender Documents are available to the prequalified tenderers on written request accompanied by a bank certified cheque or a bank draft made payable to the Department of Works, in the amount equivalent toKina per set for Lot I and Kina per set for set for a combined lot, non refundable at the following address:

Setting Out Co-ordinate Schedule

The Chairman
Works, Supply and Tenders Board
P.O. Box 1142
Boroko
Papua New Guinea

Telex : 22200 Facsimile : 241400

The time and date for returning tenders to the above address is

Envelopes containing the completed Tender Documents must bear the Contract number and closing date of tender.

Tenders will be opened in public at

TRANS-ISLAND HIGHWAY BEREINA TO MALALAUA ROAD CONSTRUCTION PROJECT CENTRAL/GULF PROVINCES

TENDER DOCUMENTS (LOT I AND LOT II)

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INSTRUCTIONS TO TENDERERS

INSTRUCTIONS TO TENDERERS

(a) General

- 1. Description of Works
- 1.1 The Bereina to Malalaua project involves the construction of 80.6 kilometres of road along the coast of Central and Gulf Provinces, and forms part of the 575 kilometre Trans-Island Highway which will link Port Moresby to Lae.
- 1.2 All permanent and temporary works in connection with the Bereina to Malalaua road construction project are divided into the following two (2) lots:
 - Lot I: Bereina to Miaru River Section 33.5 km
 - Lot II: Miaru River to Malalaua Section 47.1 km
- 1.3 The tenderers may quote for either Lot I or Lot II, or for both Lots (Lot I and Lot II), subject to prequalification. If a tenderer quotes for both Lots as a combined package, he should also submit tenders for each lot individually, and indicate separately the price reduction applicable to a combined package.
- 1.4 Tenders will be evaluated for each lot individually or a combined package of both lots with the price reduction, if any. The Employer reserves the right to award contracts either for the individual lots or for the combined package.
- 1.5 Where a tenderer proposes to tender for one Lot only, references in these Instructions to Tenderers to the other Lot (for which the tenderer does not propose to tender) shall be deleted.
- 1.6 Tenders shall be for the entire scope of work of either Lot I or Lot II or both Lots in accordance with the prequalification. Tenders for partial lots will not be considered; alterations to any of the Tender Documents will not be accepted.
- 1.7 All blank spaces shall be completed and any tender in which all the required prices and particulars are not filled in may be deemed to be non-compliant and liable to rejection.

1.8 The Contract(s) for which the tenders are submitted is a Unit Price Remeasurement Contract with a priced Bill of Quantities. Work performed under this Contract shall be in conformity and accordance with, and subject to, the Tender Documents as defined hereunder.

2. Source of Funds

- The Independent State of Papua New Guinea (hereinafter referred to as "the Employer") has received a loan from the Overseas Economic Cooperation Fund of Japan (hereinafter referred to as "the OECF") in Japanese Yen towards the cost of construction of the Bereina to Malalaua road in Central/Gulf Provinces. The Employer has applied for a loan from the OECF toward the foreign exchange cost of the Works covered by this Contract, and intends to apply the proceeds of this loan to eligible payment under the Contract for which this Invitation to Tenderers is issued.
- 2.2 Payments by the OECF will be made only upon approval by the OECF on application presented by the Employer in accordance with the terms and conditions of the Loan Agreement and will be subject in all respects to the terms and conditions of that Agreement.
- 2.3 The proceeds of the loan are required to be used with due attention to considerations of economy, efficiency and non-discrimination among countries which are eligible for procurement of goods and services (such countries are hereinafter called "the eligible source countries").

3. Eligibility and Qualification Requirement

- 3.1 This tender is limited to companies and firms acting either alone or in joint venture who have been prequalified by the Employer. If, between the time a tenderer is prequalified to tender and the tenders are opened, conditions arise which could in the opinion of the Employer substantially change the performance of the tenderer, the Employer reserves the right to reject any tender submitted by the tenderer.
- 3.2 Tenderers who intend to present tenders alone, or acting as a sponsor company in case of tenders being presented by a joint venture or consortium, shall be nationals of the eligible source countries or juridical persons (companies and firms) incorporated and registered in the eligible source countries and controlled by nationals of the eligible source countries. Such companies shall satisfy all of the following conditions:

- (a) A majority of the subscribed shares shall be held by nationals of the eligible source countries;
- (b) A majority of the full-time directors shall be nationals of the eligible source countries;
- (c) Such companies shall be incorporated and registered in the eligible source countries.
- 3.3 The names of the eligible source countries are given in the Appendix to Instructions to Tenderers.
- Goods eligible for financing under the OECF loan are those produced in the eligible source countries. However, even if goods contain materials imported from a country or countries other than the eligible source countries (hereinafter referred to as the "non-eligible source country"), such goods may be eligible for financing under the OECF loan, if the imported portion from non-eligible source country is less than fifty (50) percent of the price per unit of such products in accordance with the following formulae:
 - (a) When a Papua New Guinean tenderer is awarded the Contract:

Imported C.I.F. Price + Import Duty x 100 Supplier's Ex-Factory Price

(b) When a tenderer of the eligible source countries other than Papua New Guinea is awarded the Contract:

Imported C.I.F. Price + Import Duty x 100 Supplier's F.O.B. Price

The tenderers shall submit the certificate for source, origin and eligibility in accordance with the Form contained herein.

- 3.5 In the event that the successful tenderer is a joint venture formed of two or more companies, the Employer requires that the parties to the joint venture accept joint and several liability for all obligations under the Contract. Tenders submitted by a joint venture of two or more companies shall comply with the following requirements:
 - (a) the tender, and in case of a successful tender, the Form of Agreement, shall be signed so as to be legally binding on all companies.
 - (b) one of the companies shall be authorised to be in charge; and this authorisation shall be evidenced by submitting a power of attorney signed by legally authorised signatories of all companies;

- (c) the company in charge shall be authorised to incur liabilities and receive instructions for and on behalf of any or all companies of the joint venture and the entire execution of the Contract including payment shall be done exclusively with the company in charge;
- (d) all companies of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorisation mentioned under (b) above as well as in the Tender Form and the Form of Agreement (in case of a successful tender); and
- (e) the tenderer shall submit with his tender a joint venture agreement duly registered and legalized stating the share of participation of the sponsor company and member companies.

4. Cost of Tendering

4.1 The tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

5. Site Visit

- 5.1 The tenderer is advised to visit and examine the Site of the Works and its surroundings and obtain for himself on his own responsibility, all information that may be necessary for preparing his tender and entering into a Contract. The costs of visiting the site shall be at the tenderer's own expense.
- The tenderer and any of his personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such inspection, but only upon the express condition that the tenderer, his personnel or agents, will release and indemnify the Employer and his personnel and agents, from and against all liability in respect thereof and will be responsible for personal injury (whether fatal or otherwise), loss or damage to property and any other loss, damage, costs and expenses however caused, which, but for the exercise of such permission would not have arisen.
- 5.3 Geological, meteorological, hydrological and other general information on the Site are made available to the tenderers by the Employer as reference information, but shall not form part of the Tender Documents. The Employer

does not guarantee the exactness of the data and information supplied. The interpretation of such reference information shall be the responsibility of the tenderer.

- 5.4 The tenderer shall satisfy himself, by careful inspection as to the nature and location of the Works, the nature of geological, hydrological and climatic conditions, the character, quality and quantity of the materials to be encountered, the type of equipment and facilities needed for the execution of the Works, the general and local conditions including transport conditions, labour conditions and labour rates, the equipment to be furnished and installed and all other matters which can in any way affect the Works under the Contract.
- tenderer shall not claim at any time after the 5.5 submission of the tender or in the subsequent execution of the Contract that there was any misunderstanding with regard to the conditions prevailing on the Site or in Papua New Guinea.

(b) Tender Documents

- 6. Content of Tender Documents
- 6.1 The Tender Documents issued for the purpose of tendering consist of the following together with any amendment issued in accordance with Clause 8.
 - (a) Volume I (Lot I and Lot II)
 - Instructions to Tenderers
 - Appendix to Instructions to Tenderers
 - Form of Tender Security (Bank Guarantee)

 - Form of Tender Security (Bond)
 Form of Performance Security (Bond)
 - Form of Bank Guarantee for Advance Payment
 - Form of Agreement
 - Form of Certificate for Source, Origin and Eligibility
 - Conditions of Contract

Part I General Conditions

Part II Conditions of Particular Application

- Volume II-1 (Lot I) (b)
 - Form of Tender
 - Appendix to Form of Tender
 - Schedules to the Tender
 - Conditions of Contract Part III

Nominated Borrow Pits

Bill of Quantities

- (c) Volume II-2 (Lot II)
 - Form of Tender
 - Appendix to Form of Tender
 - Schedules to the Tender
 - Conditions of Contract Part III
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 - Bill of Quantities
- (d) Volume III-1 (Lot I)
 - Specification
- (e) Volume III-2 (Lot II)
 - Specification
- (f) Volume IV-I (Lot I)
 - Drawings
- (g) Volume IV-2 (Lot II)
 - Drawings
- (h) Volume V-I (Lot I)
 - Setting out Co-ordinate Schedule
- (i) Volume V-2 (Lot II)
 - Setting out Co-ordinate Schedule
- (j) All amendment if any
- (k) Any supplementary date which the tenderer shall submit with the tender in accordance with the Tender Documents.
- One (1) complete set of Tender Documents will be issued to the tenderers qualified for either Lot I or Lot II and both Lots (Lot I and Lot II).
- 6.2 The Tender Documents can be obtained by tenderers on payment of the amount mentioned in the Appendix to Instructions to Tenderers. The cost of the Tender Documents will not be refunded under any circumstances. This payment shall be in the form of a bank certified cheque or bank draft made payable to the Department of Works.
- 6.3 If no tender is being submitted, all of the Tender Documents should be returned without delay. The Tender Documents are not transferable.

6.4 The tenderer is expected to examine carefully all instructions, conditions, forms, terms, specification and drawings in the Tender Documents. Failure to comply with the requirements of tender submission will be at the tenderer's own risk. Tenders which are not substantially responsive to the requirements of the Tender Documents will be rejected.

7. Clarification of Tender Documents

- 7.1 A tenderer requiring any clarification of the Tender Documents may notify the Employer in writing or by telex or cable at the Employer's mailing address indicated in the Appendix to Instructions to Tenderers. The Employer will respond in writing to any request for clarification which he receives earlier than twenty eight (28) days prior to the deadline for the submission of tenders.
- 7.2 Written copies of the Employer's response (including explanation of the query but without identifying the source of the inquiry) will be sent to all tenderers who have purchased the Tender Documents.

8. Amendment to Tender Documents

- 8.1 At any time prior to the deadline for the submission of tenders, the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a tenderer, modify the Tender Documents by amendment.
- 8.2 Any amendment will be sent in writing or by telex or cable to all tenderers who have purchased the Tender Documents and will be binding upon them. Tenderers shall promptly acknowledge receipt thereof by signing and returning the receipt form distributed with the amendment at the same time advising the Employer by telex or cable.
- 8.3 In order to afford tenderers reasonable time in which to take an amendment into account in preparing their tenders, the Employer may, at his discretion, extend the deadline for the submission of tenders in accordance with Clause 20.
- 8.4 All amendment issued will become part of the Tender Documents. Failure to acknowledge any amendment may result in the tender being rejected.

9. Documents Confidential

9.1 All recipients of Tender Documents for the Contract, for the purpose of submitting a tender (whether they submit a tender or not), shall treat the contents of the documents as "Private and Confidential". 9.2 All documents and information received by the Employer and the Engineer from the tenderers will be strictly confidential. Opened Tender Documents will not be returned to the tenderers.

(c) Preparation of Tenders

10 Language of Tender

10.1 The tender prepared by the tenderer and all correspondence and documents relating to the tender exchanged by the tenderer and the Employer shall be written in the English language. Supporting documents and printed literature furnished by the tenderer with the tender may be in another language provided they are accompanied by an appropriate translation of pertinent passages in the above stated language. For the purpose of interpretation of the tender, the English language shall prevail.

11. Documents Comprising the Tender

- 11.1 The tender to be prepared by the tenderer shall comprise the followings: the Form of Tender and Appendix thereto; the Tender Security; the Priced Bill of Quantities; the Schedules to the Tender; the Certificate for Source, Origin and Eligibility; alternative Tender (if any), and any other materials required to be completed and submitted in accordance with the Instructions to Tenderers embodied in these Tender Documents. The original Forms of Contract Agreement, Performance Security and Bank Guarantee for Advance Payment shall be submitted along with the tender after being duly endorsed therein by the tenderer.
- 11.2 The forms provided in Volume I, and the Bill of Quantities and Schedules provided in Volume II of the Tender Documents shall be used without exception (subject to extensions of the Schedules in the same format and to the provisions of Clause 15.2 regarding the alternative form of Tender Security).
- 11.3 All documents issued for the purpose of tendering as described in Clause 6.1, and addenda issued in accordance with Clause 8, shall be deemed incorporated in the tender.
- 11.4 These documents contain the tender for one contract basis of Lot I and Lot II individually. If the tenderers are tendering on both Lots as a combined lot, then each lot is to be tendered separately. The tenders for Lot I and Lot II are to be sealed in a separate envelope and submitted on the same date and at the same time.

- 11.5 All tenders shall be accompanied by the following information, data, schedule and documents, as a supplementary information.
 - (a) A programme and memorandum of procedure describing in detail the proposed construction methods for the Works:
 - Excavation, hauling and fill construction methods including borrow pit, excavation of unsuitable material, etc.
 - Embankment method on soft ground in the swamp area including sand mat filling, geotextile fabric installation, grubbing roots and grasses, borrow pits, drainage pipe installation, etc.
 - Construction method for subbase, base and sealing including borrow pits, river deposits, cement stabilization plant, etc.
 - Piling method including temporary works, erection method of bridge construction, deck construction method, etc.
 - Arrangement of temporary works for contractor's office, quarters, camps, access roads, temporary bridges, etc.
 - Transportation and mobilization plan.
 - Note: The programme shall be shown in detail in bar chart form for the proposed construction sequence of each feature from the start to the completion of the Works, (see Schedule G in Volume II-1 and II-2).
 - (b) Information on materials required from foreign countries.
 - (c) Itemized list of construction plant and equipment, (Schedule A in Volume II-1 and II-2).
 - (d) Tenderer's proposals for supervising the work, including the numbers and experience of the various grades of supervisory personnel. (Schedule C in Volume II-1 and II-2).
 - (e) Any supplementary data which the tenderer is required to submit with his tender in accordance with the Tender Documents.

12. Tender Prices

12.1 The Form of Tender and Bill of Quantities are provided in Volume II-1 and II-2 for the Lot I Works and the Lot II

Works respectively. If a tenderer wishes to quote for both Lots as a combined package, he should complete the Form of Tender for the combined package included in Volume II-2, and the individual Forms of Tender for Lot I and II.

- 12.2 The tenderer shall fill in rates and prices for all items of Works described in the Bill of Quantities, whether quantities are stated or not. Items against which no rates or prices are entered by the tenderer will not be paid for by the Employer when executed and shall be deemed to be covered by the other rates and prices in the Bill of Quantities.
- 12.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, shall be included in the rates and prices and total amount of tender submitted by the tenderer, and the evaluation and comparison of tenders by the Employer shall be made accordingly. Tenderer's attention is drawn to Clause 73.1 of the Condition of Contract with regard to taxation and duties payable in Papua New Guinea.
- 12.4 The rates and prices quoted by the tenderer are subject to adjustment during the performance of the Contract in accordance with the provisions of Clauses 70.1 and 70.2 of the Conditions of Contract. The tenderer shall complete Schedules E and F and shall submit with his tender such other supporting information as required under Clause 70.2 of the Conditions of Contract.
- 12.5 If the tender is awarded both Lots, the percentage of reduction tendered on a combined package will be applied to the total of each certificate for payment.
- 13. Currencies of Tender and Payment
- 13.1 The tender prices and unit rates shall be quoted by the tenderer entirely in Papua New Guinea Kina. A tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as "the foreign currency requirement") shall indicate the percentage of the tender amount (net of provisional sums, if any) needed by him for the payment of such foreign currency requirements.
- 13.2 For the payment of foreign currency portion financed by the Fund, the fixed percentage to be decided by the Employer will be applied after due consideration of the tenderer's requirement. The remaining part of the Contract Price will be financed by the Government of Papua New Guinea. The portion of the Contract Price to be financed by the Fund will be paid in Japanese Yen or in US Dollars. In case of Japanese tenderers, the Fund

Financed Part will be paid in Japanese Yen. The portion of the Contract Price to be financed by the Independent State of Papua New Guinea will be paid in Papua New Guinea Kina.

- 13.3 The rate of exchange to be used by the tenderers for currency conversion shall be the governing selling rates published by the Bank of Papua New Guinea twenty eight (28) days prior to the latest date for submission of tenders for the Works. If exchange rates are not so published for certain currencies, the tenderers shall state the rates used and the source. The exchange rates used in tender preparation shall apply for the duration of the Contract so that no currency exchange risk is borne by the tenderer.
- 13.4 Tenderers shall indicate their expected foreign currency requirements in Schedule I and its Annex including but not limited to the specific requirements for:
 - (a) expatriate staff and labour employed directly on the Works;
 - (b) social, insurance, medical and other charges relating to such expatriate staff and labour, and foreign travel expenses;
 - (c) imported materials both temporary and permanent, required for the Works;
 - (d) depreciation and use of imported plant and equipment, including spare parts, required for the Works;
 - (e) foreign insurance and freight charges for imported materials, plant and equipment, including spare parts;
 - (f) overhead expenses, fees and financial charges arising outside Papua New Guinea in connection with the Works.
- 13.5 Tenderers may be required by the Employer to clarify their foreign currency requirements, and to justify the amounts included in the unit rates and in Schedule I and its Annex as reasonable and responsive to Clause 26.
- 14. Tender Validity
- 14.1 Tenders shall remain valid and open for acceptance for the period stated in the Appendix to Instructions to Tenderers after the date of tender opening prescribed Clause 23.

14.2 In exceptional circumstances, prior to expiry of the original tender validity period, the Employer may request the tenderer for a specified extension in the period of validity. The request and the responses thereto shall be made in writing or by cable or telex. A tenderer may refuse the request without forfeiting his tender security. A tenderer agreeing to the request will neither be required nor permitted to modify his tender, but will be required to extend the validity of his tender security correspondingly. The provisions of Clause 15 regarding discharge and forfeiture of tender security shall continue to apply during the extended period of tender validity.

15. Tender Security

- 15.1 The tenderer shall furnish, as part of his tender, a tender security (in the amount stated in the Appendix to Instructions to Tenderers).
- 15.2 Each tender will be considered on an individual basis. The tenderer shall furnish tender security for the Lot I and Lot II tenders separately.
- 15.3 The tender security shall be denominated in the currency of the tender and shall, at the tenderer's option, be in the form of a cash deposit, a certified cheque, a bank draft, an irrevocable letter of credit, a guarantee from a bank located in the country of the Employer or a foreign bank which has been determined by the tenderer to be acceptable to the Employer, or a bond issued by an insurance company or bonding company likewise located. The format of the bank guarantee or the bond shall be in accordance with one of the sample forms of tender security included in the Tender Documents; other formats may be permitted subject to the prior approval of the Employer. Letters of credit, bank guarantees and tender bonds shall be valid for twenty eight (28) days beyond the validity of the tender.
- 15.4 Any tender not accompanied by an acceptable tender security will be rejected by the Employer as non-responsive.
- 15.5 The tender securities of unsuccessful tenderers will be discharged/returned as promptly as possible but not later than twenty eight (28) days after the expiration of the period of tender validity prescribed by the Employer.
- 15.6 The tender security of the successful tenderer will be discharged upon the tenderer executing the Contract and furnishing the required performance security in accordance with Clause 10 of the Conditions of Contract.

- 15.7 Notwithstanding Clause 15.4 hereof, a separate tender security is not required for alternative offers submitted in accordance with Clause 16. However, the tender security furnished shall be deemed to be applicable equally to all or any tenders submitted.
- 15.8 The tender security may be forfeited.
 - (a) if a tenderer withdraws his tender or any alternative tender during the period of tender validity; or
 - (b) in case of a successful tenderer, if he fails to:
 - (i) enter into the Contract; or
 - (ii) furnish the necessary performance security.

16. Alternative Tenders

- 16.1 If the tenderer wishes to submit an alternative tender, it shall comply fully with the requirements of the Tender Documents as defined in Clause 26.2 hereof. The tenderer may also submit alternative tenders qualifying or deviating from the requirements of the tender documents and shall provide full details of such qualifications and deviations in accordance with Clause 16.2.
- 16.2 Unless otherwise stated in the Tender Documents, for alternative tenders made under Clause 16.1 to be considered further by the Employer in the process of tender evaluation, each item shall be accompanied by a detailed description and price breakdown indicating the tenderer's estimate of the cost implications to the Employer in accordance with Clause 29 if the alternative tender were to be accepted by the Employer and incorporated in the Contract. Tenders containing qualifications and deviations which are not so detailed and priced may be rejected. The Employer is not bound to accept the alternative tenders.
- 16.3 Technical alternatives shall be accompanied by all information necessary for a complete evaluation, including design calculations if any, technical specification, breakdown of prices, proposed construction methodology and other relevant details.
- 16.4 Furthermore, the tenderer may submit alternative bridge superstructure design and alternative substructure design with his Tender Documents. All such submissions must be accompanied by design notes, design calculations and drawings, technical specification, breakdown of prices, proposed construction methodology and other relevant details, supporting the proposed design. Alternative

bridge designs may be proposed for the bridge sites, within the "Bridge Section" chainages specified on the Drawings. The "Roadway Section" beyond the "Bridge Section" shall not be affected by any alternative bridge design.

- 16.5 No alternative tenders will be considered unless a tender, in conformity with the Tender Documents (base tender), is also submitted. Any alternative Tender Sum submitted without the basic tender prices and unit rates will be rejected.
- 16.6 The alternative tenders shall be prepared in three (3) copies consisting of one (1) master copy and two (2) duplicate, making "ALTERNATIVE TENDER FOR LOT I" or "ALTERNATIVE TENDER FOR LOT II", as appropriate.

17. Pre-Tender Meeting

- 17.1 The tenderer or his official representative is advised to attend a pre-tender meeting which will be convened at the time, date and place nominated in the Appendix to Instructions to Tenderers.
- 17.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage, and to show the tenderers around the Site of the Works.
- 17.3 The tenderer is requested to submit any questions in writing (or by cable or telex), to reach the Employer not later than one week before the meeting.
- 17.4 Minutes of the meeting, including copies of the questions raised and responses given, will be furnished expeditiously to all those attending the meeting (and subsequently to all tenderers who have purchased the Tender Documents), and shall form an integral part of the Tender Documents.
- 17.5 The official site visit will be arranged immediately after the pre-tender meeting by the Employer, in which the tenderers or their official representatives will be accompanied by the Employer. Tenderers shall be responsible for their own expenses associated with the pre-tender meeting and official site visit.

18. Format and Signing of Tenders

18.1 The tenderer shall prepare one (1) original and two (2) copies of the documents comprising the tender as described in Clause 11.1 and clearly mark "ORIGINAL" and "COPY" as appropriate. In the event of any discrepancy between them, the original shall govern.

- The original of the tender shall be typed or written in indelible ink and shall be signed by a person or persons duly authorised to bind the tenderer to the Contract. Proof of authorisation shall be furnished in the form of written Power of Attorney which shall accompany the tender. All pages of the tender where entries or amendments have been made shall be initialed by the person or persons signing the tender. The copies shall be photocopies of the original duly authorised as "Certified True Copies". The copies shall be countersigned by the person or persons signing the original.
- 18.3 The complete tender shall be without alterations, interlineations or erasures except those to accord with instructions issued by the Employer, or as necessary to correct errors made by the tenderer in which case such corrections shall be initialled by the person or persons signing the tender.
 - (d) Submission of Tender
- 19. Sealing and Marking of Tenders
- 19.1 The tenderer shall seal the original of his tender in an inner and outer envelopes, duly marking the envelopes as "ORIGINAL".

If the tender is to be a combined package of both Lots, the tenderer shall seal each Lot in separate envelopes in the same manner.

The tenderer shall also seal the two (2) copies in inner and outer envelopes, duly marking the envelopes as "COPY 1" and "COPY 2".

- 19.2 The inner and outer envelopes shall:
 - (a) be addressed to:

The Chairman
Works, Supply and Tenders Board
P.O. Box 1142
Boroko
Papua New Guniea

- (b) bear the following identification:
 - (i) Tender for Lot I

TRANS-ISLAND HIGHWAY BEREINA TO MALALAUA ROAD CONSTRUCTION PROJECT

LOT I: BEREINA TO MIARU RIVER SECTION CONTRACT NO. SC 120-33-814/A CH 0+000 TO CH 33+500

(ii) Tender for Lot II

TRANS-ISLAND HIGHWAY
BEREINA TO MALALAUA ROAD CONSTRUCTION
PROJECT

LOT II: MIARU RIVER TO MALALAUA SECTION CONTRACT NO. SC 120-33-814/B CH 33+500 TO CH 80+596

(iii) The words "DO NOT OPEN BEFORE"
(Date and time for submission of tenders)

The inner envelopes shall indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared late or is otherwise unacceptable.

- 19.3 If the outer envelope is not sealed and marked as instructed above, the Employer will assume no responsibility for the misplacement or premature opening of the tender submitted. A tender opened prematurely for this cause will be rejected by the Employer and returned to the tenderer.
- 20. Deadline for Submission of Tenders
- 20.1 Tenders must be received by the Employer at the address specified above no later than the time and date stated in the Appendix to Instructions to Tenderers.
- 20.2 The Employer may, at his discretion, extend the deadline for submission of tenders by issuing an addendum in accordance with Clause 8, in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline shall thereafter be subject to the new deadline as extended.
- 20.3 Provided that if the tenders are sent by mail, the Employer will not be responsible for not receiving the tenders before the above mentioned date and time regardless of the reasons for the delay or loss in the mail. It is strongly recommended that the tenders be delivered by hand. Tenderers shall assume all responsibility for their tender reaching the above address prior to the specified time.

21 Late Tenders

21.1 Any tenders received by the Employer after the deadline for submission of tenders prescribed by the Employer in accordance with Clause 20 will be returned unopened to the tenderer.

- 22. Modification and Withdrawal of Tenders
- 22.1 The tenderer may modify or withdraw his tender after tender submission, provided that the modification or notice of withdrawal is received in writing by the Employer prior to the prescribed deadline for submission of tenders.
- 22.2 The tenderer's modification or notice of withdrawal shall be prepared, sealed, marked and delivered in accordance with the provision of Clause 19 for the submission of tenders, with the inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL" as appropriate. Alternatively, a notice of the withdrawal may be sent to the Employer by telex or cable, followed by a confirmation copy signed and sealed by the tenderer and postmarked not later than the deadline for submission of tenders.
- 22.3 Subject to Clause 25, no tender may be modified subsequently to the deadline for submission of tenders.
- 22.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and expiration of the period of tender validity specified in the Appendix to Instructions to Tenderers. Withdrawal of a tender during this interval may result in the forfeiture of the tender security pursuant to Clause 15.

(e) Tender Opening and Evaluation

23. Tender Opening

23.1 The Employer will open the tenders, including submissions made pursuant to Clause 22, in the presence of tenderers' representatives who choose to attend, at the time and date stated in the Appendix to Instructions to Tenderers at the following location:

Conference Room, C Block, Department of Works, Headquarters, Boroko, Papua New Guniea.

The tenderers' representatives who are present shall sign a register evidencing their attendance.

23.2 Tenders for which an acceptable notice of withdrawal has been submitted pursuant to Clause 22 shall not be opened. The Employer will examine tenders to determine whether they are complete, whether the requisite tender securities have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.

- 23.3 At the tender opening, the Employer will announce the tenderers' names, the total amounts of tenders, tender modifications and withdrawals if any, the presence of the requisite tender security, and such other details as the Employer, at his discretion, may consider appropriate.
- 23.4 The Employer shall prepare minutes of the tender opening, including the information disclosed to those present in accordance with Clause 23.3 for his own records.

24. Process to be Confidential

- 24.1 After the public opening of tenders, information relating to the examination, clarification, evaluation and comparison of tenders and recommendations concerning the award of the Contract shall not be disclosed to tenderers or other persons not officially concerned with such process until the award of the Contract to the successful tenderer has been announced.
- 24.2 Any effort by a tenderer to influence the Employer in the process of examination, clarification, evaluation and comparison of tenders, and in the decisions concerning the award of the Contract, may result in the rejection of the tenderer's tender.

25. Clarification of Tenders

25.1 To assist in the examination, evaluation and comparison of tenders, the Employer may ask tenderers individually for clarification of their tenders including breakdown of unit rates. The request for clarification and the response shall be in writing or by cable or telex, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the Employer during the evaluation of the tenders in accordance with Clause 27.

26. Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of tenders, the Employer will determine whether each tender is substantially responsive to the requirements of the Tender Documents.
- 26.2 For the purpose of this Clause, a substantially responsive tender is one which conforms to all the terms, conditions and specification of the Tender Documents without material deviation or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or administration of the Works, or

which limits in any substantial way inconsistent with the Tender Documents, the Employer's rights or the tenderer's obligations under the Contract, and the rectification of which deviation or reservation would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders at reasonabe prices.

26.3 If a tender is not substantially responsive to the requirements of the Tender Documents, it will be rejected by the Employer, and may not subsequently be made responsive by the tenderer having corrected or withdrawn the non-conforming deviation or reservation.

27. Correction of Errors

- 27.1 Tenders determined to be substantially responsive will be checked by the Employer for any arithmetical errors in computation and summation. Errors will be corrected by the Employer as follows:
 - (a) Where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
 - (b) Where there is a discrepancy between the unit rate and the total amount derived from the multiplication of the unit price and the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit price, in which event, the total amount will govern and the unit rate will be corrected.
- 27.2 The amount stated in the Form of Tender will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the tenderer, shall be considered as binding upon the tenderer. If the tenderer does not accept the corrected amount of tender, his tender will be rejected and the tender security will be forfeited.

28. Conversion to Single Currency

28.1 To facilitate evaluation and comparison, the Employer will convert the foreign currency requirement to Kina at the selling exchange rate established by the Bank of Papua New Guinea, for similar transaction, on the day of the opening of the tenders.

29. Evaluation and Comparison of Tenders

29.1 The Employer will evaluate and compare only those tenders determined to be substantially responsive to the requirements of the Tender Documents in accordance with

Clause 26 and accompanying alternatives (if any).

- 29.2 The lowest responsive tender shall be based on the comparison of tenders for individual Contracts or the combination of Contracts, whichever is advantageous to the Employer. However, the Employer shall not be bound to accept the lowest or any tender.
- 29.3 The evaluation of tenders by the Employer will take into account, in addition to the Tender Sum, the following factors:
 - (a) arithmetical errors corrected by the Employer in accordance with Clause 27;
 - (b) priced alternative tenders in accordance with Clause 16;
 - (c) non-material deviations from or reservations to the Tender Documents that are quantifiable;
 - (d) the detailed construction programme (reference Schedule G);
 - (e) the proposed construction programme and memorandum of procedure; and
 - (f) such other factors as the Employer considers may have a potentially significant impact on the Contract execution, price and payments, including the effect of items or unit rates in the tender that are unbalanced or unrealistically priced.
- 29.4 A tender which, in relation to the cost estimate of the Engineer, is seriously unbalanced or contains items in the Bill of Quantities which are unrealistically priced, and which cannot be substantiated satisfactorily by the tenderer, may be rejected as non-responsive.
- 29.5 Price adjustment provisions, contained in Clause 70 of the Conditions of Contract, applying to the period of execution of the Contract shall not be taken into account in the tender evaluation.

(f) Award of Contract

30. Award Criteria

30.1 Subject to Clause 31, the Employer will award the Contract to the tenderer whose tender has been determined to be substantially responsive to the Tender Documents and who has offered the lowest evaluated tender, provided further that the tenderer has the capability and resources effectively to carry out the Contract Works.

- 31. Employer's Right to Accept Any Tender and to Reject Any or All Tenders
- 31.1 Notwithstanding Clause 30, the Employer reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders, at any time prior to the award of the Contract, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Employer's action.

32. Notification of Award

- 32.1 The Employer will notify the successful tenderer by cable or telex confirmed in writing by registered letter that his tender has been accepted. The notification will be made prior to the expiration of the period of tender validity prescribed by the Employer.
- 32.2 The notification of award will constitute the formation of the Contract.
- 32.3 Upon the furnishing by the successful tenderer of a performance security in accordance with the provisions of Clause 34, the Employer will promptly notify the unsuccessful tenderers that their tenders have been unsuccessful.

33. Signing of Agreement

- 33.1 Within twenty one (21) days of notification of the successful tenderer that his tender has been accepted, the Employer will send to the tenderer the Form of Agreement provided in the Tender Documents, incorporating all agreements between the parties.
- 33.2 Within twenty eight (28) days of receipt of the Form of Agreement, the successful tenderer shall sign the Form and return it to the Employer.

34. Performance Security

34.1 The successful tenderer shall furnish to the Employer a security in the form of a bank guarantee in accordance with Clause 10.1 of the Conditions of Contract in an amount of seven (7) percent of the Contract Price or (at the tenderer's option) a performance bond in an amount of seven (7) percent of the Contract Price in accordance with the Conditions of Contract. The Form of Performance Security annexed to the Tender Documents may be used or some other form acceptable to the Employer.

- 34.2 Failure of the successful tenderer to lodge the required performance security in an acceptable form and within the stipulated time shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Employer may make the award to the next lowest evaluated tenderer or, if there are no other tenderers, call for new tenders.
- 35. Bank Guarantee for Advance Payment
- 35.1 The successful tenderer may ask for an Advance Payment for procurement of materials etc., against a bank guarantee as set out herein and the manner in which an advance is to be made and repaid by the Contractor will be as per Clause 60.11 of the Conditions of Contract. The Form of Bank Guarantee for Advance Payment annexed to the Tender Documents may be used or some other form acceptable to the Employer.

APPENDIX TO INSTRUCTIONS TO TENDERERS

APPENDIX TO INSTRUCTIONS TO TENDERERS

| 1. | Short Description of Woo | rks: | |
|----|--|------|---|
| | Lot I | : | All Permanent and Temporary Works in connection with the construction of the Bereina to Miaru River Section (33.5 km) of the Bereina to Malalaua Road Construction Project, Central/Gulf Provinces and including the construction of three bridges. |
| | Lot II | : | All Permanent and Temporary Works in connection with the construction of the Miaru River to Malalaua Section (47.1 km) of the Bereina to Malalaua Road Construction Project, Gulf Province and including the construction of six bridges. |
| 2. | Contract Number | : | Lot I: SC 120-33-814/A Lot II: SC 120-33-814/B |
| 3. | Designated Title of Board Recommending Award of Contract | : | Works, Supply and Tenders Board |
| 4. | Time, Date and Place of Pre-Tender Meeting | : | |
| 5. | Time and Date of Returning Tender | : | |
| 6. | Time and Date of Tender Opening | : | |
| 7. | Postal Address for Return of Tenders | : | The Chairman Works, Supply and Tenders Board P.O. Box 1142 Boroko Papua New Guinea |
| 8. | Location for Returning Tenders by Hand | : | Department of Works Headquarters Boroko, Papua New Guinea |

- 9. Tender Validity Period: 180 Days
- 10. Schedules to be Completed and Returned with Tender (See Volume II 1 and Volume II 2 respectively)

SCHEDULE A Proposed Major Plant and Equipment to be Utilised in the Construction of the Works Proposed Suppliers of Materials SCHEDULE B SCHEDULE C Proposed Superintendence SCHEDULE D Anticipated Monthly Progress Statements for Measured Work at Billed Rates Tender Index Figures SCHEDULE E SCHEDULE F Increase or Decrease of Price SCHEDULE G Construction Programme Proposed Subcontractors SCHEDULE H SCHEDULE I Foreign Currency Requirements

SCHEDULE J Percentage Reduction in Contract Price SCHEDULE K,L,M, Dayworks: Labour, Materials and Plant

11. Tender Security : Lot I : K 200,000 Lot II : K 300,000

12. Charge on Tender Documents:

Tender for Lot I:

K.....or U.S.\$.....or Yen.....

Tender for Lot II:

K.....or U.S.\$.....or Yen.....

13. Employer's Address : The Secretary

Department of Works

Waigani Drive P.O. Box 1108

Boroko

Papua New Guinea

- 14. List of Eligible Source Countries
 - (1) Japan
 - (2) Asia

Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Abu Dhabi, Yemen, Yemen Dem, Afghanistan, Bangladesh, Bhutan, Burma, India, Maldives, Nepal, Pakistan, Sri Lanka, Brunei, Kampuchea, Hong Kong, Indonesia, Rep of Korea, Laos, Macao, Malaysia, Philippines, Singapore, Thailand, Taiwan, Socialist Republic of Vietnam, People's Republic of China, Timor.

(3) Africa

Algeria, Egypt, Libya, Morocco, Tunisia, Angola, Benin, Botswana, Burundi, Cameroon, Cape Verde, Central African Rep., Chad, Comoros, Congo, Equatorial Guinea, Guinea-Bissau, Ivory Coast, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Mozambique, Niger, Nigeria, Reunion, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, Djibouti, St. Helena, Sudan, Swaziland, Tanzania, Togo, Uganda, Upper Volta, Zaire, Zambia, Zimbabwe, Ethiopia, Gabon, Gambia, Ghana, Guinea.

(4) America

Canada, United State of America, Bahamas, Barbados, Belize, Bermuda, Costa Rica, Cuba, Dominican Republic, El Salvador, Guadeloupe, Guatemala, Haiti, Honduras, Jamaica, Martinique, Mexico, Netherlands Antilles, Nicaragua, Panama, St. Pierre & Miquelon, Trinidad and Tobago, West Indies, Anguilla, Antigua, Cayman Islands, Dominica, Grenada, Montserrat, St. Kitts-Nevis, St. Lucia, St. Vincent, Turka and Caicos Islands, Virgin Islands, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, Guyana, Guiana (Fr), Paraguay, Peru, Surinam, Uruguay, Venezuela.

(5) Europe

Austria, Belgium, Denmark, Finland, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, Cyprus, Gibraltar, Greece, Malta, Portugal, Turkey, Yugoslavia, Spain, Ireland, Iceland, Luxembourg.

(6) Oceania

Australia, New Zealand, Cook Islands, Fiji, Kiribati, French Polynesia, Nauru, New Caledonia, Niue Island, Pacific Islands (U.S.), Papua New Guinea, Solomon Islands, Tokelau Islands, Tonga, Tuvalu, Wallis and Futuna, Western Samoa, Vanuatu.

FORM OF TENDER SECURITY (BANK GUARANTEE)

FORM OF TENDER SECURITY (BANK GUARANTEE)

(Note: The Tenderer may complete either this form of Bank Guarantee or a form of Bond or provide other acceptable security)
 To: The Independent State of Papua New Guinea Department of Works
 P.O. Box 1108

CONTRACT NO. SC 120-33-814/A (Lot I)

Boroko

Papua New Guinea

| WHEREAS, |
|--|
| |
| KNOW ALL MEN by these presents that we(Name of Bank) of |
| (Name of Country) having our registered office at |
| (hereinafter called "the Bank") are bound unto the Independent State of Papua New Guinea (hereinafter called "the Employer") in the sum of |
| for which payment well and truly to be made to the said Employer the Bank binds itself, its successors and assigns by these presents. |

THE CONDITIONS of this obligation are:

- (a) if the Tenderer withdraws his tender during the period of tender validity specified in the Form of Tender; or
- (b) if the Tenderer having been notified of the acceptance of his tender by the Employer during the period of tender validity:
 - fails or refuses to execute the Contract Form of Agreement in accordance with the Instructions to Tenderers; or
 - (ii) fails or refuses to furnish the Performance Security in accordance with the Instructions to Tenderers.

We undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including twenty eight (28) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

| Sealed with the Common Se | | | | | |
|---------------------------|-----|------|------|------|--------|
| | day | of . | | | 19 |
| | | | | | |
| SIGNATURE FOR THE BANK | | | | | • |
| SIGNATURE OF THE WITNESS | | | | | |
| NAME OF THE WITNESS | | | | | • |
| ADDRESS OF THE WITNESS | | | | | • |

*Insert the amount of the guarantee in words Note: figures denominated in the currency of the tender or in a freely convertible currency acceptable to the

Employer.

FORM OF TENDER SECURITY (BANK GUARANTEE)

(Note: The Tenderer may complete either this form of Bank Guarantee or a form of Bond or provide other acceptable security.)

To: The Independent State of Papua New Guinea

Department of Works

P.O. Box 1108

Boroko

Papua New Guinea

CONTRACT NO. SC 120-33-814/B (Lot II)

| WHEREAS, |
|--|
| Tenderer") has submitted his tender dated |
| KNOW ALL MEN by these presents that we(Name of Bank) of |
| (Name of Country) having our registered office at |
| (hereinafter called "the Bank") are bound unto the Independent State of Papua New Guinea (hereinafter called "the Employer") in the sum of |
| for which payment well and truly to be made to the said Employer the Bank binds itself, its successors and assigns by these presents. |

THE CONDITIONS of this obligation are:

- (a) if the Tenderer withdraws his tender during the period of tender validity specified in the Form of Tender; or
- (b) if the Tenderer having been notified of the acceptance of his tender by the Employer during the period of tender validity:
 - (i) fails or refuses to execute the Contract Form of Agreement in accordance with the Instructions to Tenderers; or
 - (ii) fails or refuses to furnish the Performance Security in accordance with the Instructions to Tenderers.

We undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including twenty eight (28) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

| Sealed with the Common Se | | | |
|---------------------------|----------|------|-------------|
| SIGNATURE FOR THE BANK | ,,,,,,,, | | • • • • • • |
| SIGNATURE OF THE WITNESS | | | |
| NAME OF THE WITNESS | | | |
| ADDRESS OF THE WITNESS | | | |

Note: *Insert the amount of the guarantee in words and figures denominated in the currency of the tender or in a freely convertible currency acceptable to the Employer.

FORM OF TENDER SECURITY (BOND)

FORM OF TENDER SECURITY (BOND)

(Note: The Tenderer may complete either this form of Bond or a form of Bank Guarantee or provide other acceptable Security)

To: The Independent State of Papua New Guinea
Department of Works
P. O. Box 1108
Boroko
Papua New Guinea

CONTRACT NO. SC 120-33-814/A (Lot I)

BOND NO DATE BOND EXECUTED of Tenderer), hereinafter called "the Principal" as Principal and.....(Name of Surety) of the country of..... (Name of Country of Surety), authorised to transact business in the country of...... (Name of Country of Borrower), hereinafter called "the Surety", are held and firmly bound unto the Independent State of Papua New Guinea as Obligee, hereinafter called "the Employer", in the)* for the payment of which sum, well and truly to be made, we, the said Principal and Surety bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

NOW THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the Principal withdraws his tender during the period of tender validity specified in the Form of Tender; or
- (2) If the Principal having been notified of the acceptance of his tender by the Employer during the period of tender validity:
 - (i) fails or refuses to execute the Contract Form of Agreement in accordance with the Instructions to Tenderers; or
 - (ii) fails or refuses to furnish the Performance Security in accordance with the Instructions to Tenderers.

Then this obligation shall remain in full force and effect, otherwise it shall be null and void.

PROVIDED HOWEVER, that the Surety shall not be:

- (a) liable for a greater sum than the specified penalty of this bond, nor
- (b) liable for a greater sum than the difference between the amount of the said Principal's tender and the amount of the tender that is accepted by the Employer.

The Surety executing this instrument hereby agrees that its obligation shall not be impaired by any extension(s) of the time for acceptance of the tender that the Principal may grant to the Employer, notice of which extension(s) to the Surety being hereby waived.

| Sealed with our day of | | | | | | | S | ε | ın | d | d | a | te | ed | | th | i | S | • | • | ٠ | • | • | • • | • | • • | • | • • |
|--|---|-------|-------|-------|---|------|---|---|----|---|---|---|----|----|---|----|---|---|---|---|---|-------|---|-----|---|-----|-------|-----|
| PRINCIPAL SIGNATURE(S) NAME(S) AND TIT | | | | , | | | | | | | | | | | | | | | | ٠ | | | | | | | | |
| SURETY SIGNATURE(S) NAME(S) | • | • | • | | • | | | | | | | • | | | • | | • | ٠ | | • | • | | | | | | | |

Note: *Insert the amount of bond in words and figures, denominated in the currency of the tender or in a freely convertible currency acceptable to the Employer.

FORM OF TENDER SECURITY (BOND)

(Note: The Tenderer may complete either this form of Bond or a form of Bank Guarantee or provide other acceptable Security)

To: The Independent State of Papua New Guinea
Department of Works
P. O. Box 1108
Boroko
Papua New Guinea

CONTRACT NO. SC 120-33-814/B (Lot II)

BOND NO DATE BOND EXECUTEDKNOW ALL MEN BY THESE PRESENTS, that we(Name of Tenderer), hereinafter called "the Principal" as Principal and.......(Name of Surety) of the country of..... (Name of Country of Surety), authorised to transact business in the country of..... (Name of Country of Borrower), hereinafter called "the Surety" are held and firmly bound unto the Independent State of Papua New Guinea as Obligee, hereinafter called "the Employer", in the)* for the payment of which sum, well and truly to be made, we, the said Principal and Surety bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

NOW THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the Principal withdraws his tender during the period of tender validity specified in the Form of Tender; or
- (2) If the Principal having been notified of the acceptance of his tender by the Employer during the period of tender validity:
 - (i) fails or refuses to execute the Contract Form of Agreement in accordance with the Instructions to Tenderers; or
 - (ii) fails or refuses to furnish the Performance Security in accordance with the Instructions to Tenderers.

Then this obligation shall remain in full force and effect, otherwise it shall be null and void.

PROVIDED HOWEVER, that the Surety shall not be:

- (a) liable for a greater sum than the specified penalty of this bond, nor
- (b) liable for a greater sum than the difference between the amount of the said Principal's tender and the amount of the tender that is accepted by the Employer.

The Surety executing this instrument hereby agrees that its obligation shall not be impaired by any extension(s) of the time for acceptance of the tender that the Principal may grant to the Employer, notice of which extension(s) to the Surety being hereby waived.

| Sealed with our respective Seals and dated day of 19 | this |
|--|------|
| PRINCIPAL SIGNATURE(S) NAME(S) AND TITLE(S) | |
| SURETY SIGNATURE(S) NAME(S) | |

Note: *Insert the amount of bond in words and figures, denominated in the currency of the tender or in a freely convertible currency acceptable to the Employer.

FORM OF PERFORMANCE SECURITY (BOND)

FORM OF PERFORMANCE SECURITY (PERFORMANCE BOND)

To: The Independent State of Papua New Guinea
Department of Works
P. O. Box 1108
Boroko
Papua New Guinea

CONTRACT NO SC

| | | We · · · · | | | | | | | |
|-------|---------|------------|---------------------------------------|---------|----------|---------|------------|--------|-------|
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| (here | inafter | called | the calle | ed "the | Contrac | ctor) a | $nd \dots$ | | |
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| | | | ate of Pa | | | | | | |
| "the | Employe | r") in t | he sum of | f | | | | | |
| | | | (| (K | |) | for t | the pa | yment |
| of wh | ich sum | the Con | tractor a | and the | Surety | bind t | hemsel | lves, | their |
| succe | ssors a | nd assig | ns joint] | ly and | severall | y by t | hese p | resen | ts. |

WHEREAS the Contractor by an Agreement made between the Employer of the one part and the Contractor of the other part has entered into a Contract (hereinafter called "the said Contract") for the construction, completion and maintenance of certain Works as therein mentioned in conformity with the provisions of the said Contract.

NOW THE CONDITION of the above-written Bond is such that if the Contractor shall duly perform and observe all the terms, provisions, conditions and stipulations of the said Contract on the Contractor's part to be performed and observed according to the true purport intent and meaning thereof or if on default by the Contractor the Surety shall satisfy and discharge the damages sustained by the Employer thereby up to the amount of the above written Bond then this obligation shall be null and void but otherwise shall be and remain in full force and effect but no alteration in terms of the said Contract made by agreement between the Employer and the Contractor or in the extent or nature of the Works to be constructed, completed and maintained thereunder and no allowance of time by the Employer or the Engineer under the said Contract nor any forbearance or forgiveness in or in respect of any matter or thing concerning the said Contract on the part of the Employer of the said Engineer shall in any way release the Surety from any liability under the above-written Bond.

| seared with our respective Sears | |
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| day of19 | • • • • |
| THE COMMON SEAL of the said) | |
| Contractor) | |
| was hereunto affixed in the) | |
| the presence of) | WITNESS |
| | |
| Signed byfor and on) | |
| behalf of the said Contractor) | * |
| in the presence of) | ****** |
|) | WITNESS |
| THE COMMON SEAL of the said) | |
| Surety) | |
| was hereunto affixed in the | • |
| presence of) | |
| | WITNESS |

ALTERNATIVE FORM OF PERFORMANCE SECURITY (PERFORMANCE BOND)

To: The Independent State of Papua New Guinea Department of Works P. O. Box 1108 Boroko Papua New Guinea

CONTRACT NO. SC

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Should you on behalf of the Employer notify us in writing that payment should be made to the Employer of the whole or part of the guaranteed sum, such payments will be made forthwith without reference to the Contractor and notwithstanding any notice to the contrary given by the Contractor to us not to pay the same.

We will hold ourselves responsible to the Employer for the guaranteed sum until notification in writing is received from you either that this undertaking is no longer required by the Employer or that payment should be made to the Employer of the whole of the guaranteed sum or the balance remaining after any part payments.

This undertaking is valid fromto.....to......which is inclusive of the twelve (12) months Period of Maintenance.

We reserve the right to terminate the liability under this undertaking at any time by paying to the Employer the guaranteed sum or the balance remaining after any part payments or so much thereof as you may require.

Notes: /1. Insert the name of the Tenderer.

- /2. Insert the amount of the Performance Bond given in the Appendix to Tender.
- /3. Insert name of the Bank.

FORM OF BANK GUARANTEE FOR ADVANCE PAYMENT

FORM OF BANK GUARANTEE FOR ADVANCE PAYMENT

To: The Independent State of Papua New Guinea
Department of Works
P. O. Box 1108
Boroko
Papua New Guinea

CONTRACT NO. SC 120-33-814/A (Lot I)

NOW WE,......(Name of the Bank), undertake to hold overselves responsible to the Employer for the said sum of(K.....) hereinafter called "the guaranteed sum".

Should the Employer notify us in writing that payment should be made to the Employer of the whole or part of the guaranteed sum, such payments will be made forthwith without reference to the Contractor and notwithstanding any notice to the contrary given by the Contractor to us not to pay the same.

We will hold ourselves responsible to the Employer for the guaranteed sum until notification in writing is received from the Employer either that this Guarantee is no longer required by the Employer or that payment should be made to the Employer of the whole of the guaranteed sum or the balance remaining after any part payments.

We reserve the right to terminate the liability under this undertaking at any time by paying to the Employer the guaranteed sum or the balance remaining after any part payments or so much thereof as the Employer may require.

| Dated at thisday | of19 |
|---|------|
| SIGNED AND DELIVERED by the saidas the Attorney for and on behalf of: | |
| in the presence of: | |
| | |
| Witness | |

FORM OF BANK GUARANTEE FOR ADVANCE PAYMENT

To: The Independent State of Papua New Guinea
Department of Works
P. O. Box 1108
Boroko
Papua New Guinea

CONTRACT NO. SC 120-33-814/B (Lot II)

AND WHEREAS the said Contract provides for the Employer to pay to the Contractor the sum of.......), being an Advance Payment subject to the Contractor furnishing the Employer with an unconditional guarantee as Security for the said sum.

Should the Employer notify us in writing that payment should be made to the Employer of the whole or part of the guaranteed sum, such payments will be made forthwith without reference to the Contractor and notwithstanding any notice to the contrary given by the contractor to us not to pay the same.

We will hold ourselves responsible to the Employer for the guaranteed sum until notification in writing is received from the Employer either that this Guarantee is no longer required by the Employer or that payment should be made to the Employer of the whole of the guaranteed sum or the balance remaining after any part payments.

We reserve the right to terminate the liability under this undertaking at any time by paying to the Employer the guaranteed sum or the balance remaining after any part payments or so much thereof as the Employer may require.

| Dated at thisday | of19. |
|--|-------|
| SIGNED AND DELIVERED by the saidas the Attorney for and on behalf of | |
| in the presence of: | |
| *************************************** | |
| Witness | |

FORM OF AGREEMENT

FORM OF AGREEMENT

CONTRACT NO.SC 120-33-814/A (Lot I)

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| called "the Empl | oyer") of the one | part and | |
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| | led "the Contract | • | ~ |
| registered offic | e is at | | |
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WHEREAS the Employer is desirous that certain works should be constructed, viz. All Permanent and Temporary Works in connection with the construction of the Bereina to Miaru River Section (33.5 km) of the Bereina to Malalaua Road Construction Project, Central/Gulf Provinces; and has accepted a Tender by the Contractor for the construction, completion and maintenance of such Works.

NOW THIS AGREEMENT WITNESSETH as follows:-

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the 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, viz:-
 - (a) Instructions to Tenderers, Tender and Appendix annexed thereto;
 - (b) The Drawings;
 - (c) The Conditions of Contract (Parts I, II and III);
 - (d) The Specification;
 - (e) The Bill of Quantities;
 - (f) The Schedules to the Tender;
 - (g) Such Schedules, Declarations and Certificates as are required to be submitted by the Tenderers as set out in the Conditions of Contract;
 - (h) Such Schedule of Tender Qualifications (if any) which are mutually acceptable to the parties hereto for incorporation into the Contract;
 - (i) The Performance Security;
 - (j) Any addenda or corrigenda issued by the Engineer;
 - (k) The Letter of Acceptance.

All the said documents except for the Specification and Drawings being bound together with this Agreement. The Specification and Drawings shall for the purpose of identification be signed by the Parties hereto.

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 construct, complete and maintain the Works in conformity in all respects with the provisions of the Contract.

| respective Common Seals to be | rties hereto have caused their hereunto affixed (or have hereunto ad Seals) the day and year first |
|--|--|
| Signed for and on behalf of) the Employer by a duly authorized person in the presence of | WITNESS |
| THE COMMON SEAL OF)) was hereunto affixed) in the presence of) | WITNESS |
| Signed by | WITNESS |
| Signed by | WITNESS |

The Employer hereby covenants to pay the Contractor in consideration of the construction, completion and maintenance of the Works the Contract Price at the times and

in the manner prescribed by the Contract.

4.

FORM OF AGREEMENT

CONTRACT NO.SC 120-33-814/B (Lot II)

| THIS AGREEMENT made the | day | of | 19 |
|----------------------------|------------------|------------|--------------|
| Between the Independent | State of Papua | New Guinea | (hereinafter |
| called "the Employer") o | f the one part a | nd | |
| (hereinafter called "the | | | |
| registered office is at | - | | - |
| | | | |

WHEREAS the Employer is desirous that certain works should be constructed, viz. All Permanent and Temporary Works in connection with the construction of the Miaru River to Malalaua Section (47.1 km) of the Bereina to Malalaua Road Construction Project, Gulf Province; and has accepted a Tender by the Contractor for the construction, completion and maintenance of such Works.

NOW THIS AGREEMENT WITNESSETH as follows:-

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the 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, viz:-
 - (a) Instructions to Tenderers, Tender and Appendix annexed thereto;
 - (b) The Drawings;
 - (c) The Conditions of Contract (Parts I, II and III);
 - (d) The Specification;
 - (e) The Bill of Quantities;
 - (f) The Schedules to the Tender;
 - (g) Such Schedules, Declarations and Certificates as are required to be submitted by the Tenderers as set out in the Conditions of Contract;
 - the Conditions of Contract;
 (h) Such Schedule of Tender Qualifications (if any) which are mutually acceptable to the parties hereto for incorporation into the Contract;
 - (i) The Performance Security;
 - (j) Any addenda or corrigenda issued by the Engineer;
 - (k) The Letter of Acceptance.
 - All the said documents except for the Specification and Drawings being bound together with this Agreement. The Specification and Drawings shall for the purpose of identification be signed by the Parties hereto.
- 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 construct, complete and maintain the Works in conformity in all respects with the provisions of the Contract.

| 4. | The | Employer | hereby | covens | ints to | pay | the | Conti | ractor | in |
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| | cons | sideratio | on of | the co | nstruc | tion | C 0 1 | nple | tion | and |
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| | in t | he manner | prescri | bed by | the Con | tract. | | | | |
| | | | | | | | | | | |

IN WITNESS whereof the parties hereto have caused their respective Common Seals to be hereunto affixed (or have hereunto set their respective hands and Seals) the day and year first above written.

| Signed for and on behalf of) the Employer by a duly) authorized person in the) presence of) | WITNESS |
|--|---------|
| THE COMMON SEAL OF | |
| , | |
|) | |
| was hereunto affixed) | |
| in the presence of) | |
|) | WITNESS |
| for and on behalf of) | |
| · · · · · · · · · · · · · · · · · · · | |
| in the presence of) | WITNESS |
| Signed by) | |
| for and on behalf of | |
| ······································ | |
| · · · · · · · · · · · · · · · · · · · | |
| in the presence of) | WITNESS |
| | uTIME99 |

FORM OF CERTIFICATE FOR SOURCE, ORIGIN AND ELIGIBILITY

FORM OF CERTIFICATE FOR SOURCE, ORIGIN AND ELIGIBILITY

| I (We) hereby certify; |
|--|
| That goods to be supplied are produced in |
| That to the best of my (our) information and belief imported portion from non-eligible source countries is less than fifty percent (50%) according to the following formula: |
| Imported C.I.F. Price + Import Duty , and Supplier's FOB Price or Ex-factory Price |
| That my (our) company is an eligible contractor, as |
| (Place and Date) (The Representative) |

CONDITIONS OF CONTRACT

CONDITIONS OF CONTRACT PART I GENERAL CONDITIONS

The General Conditions shall be the Papua New Guinea Department of Works Conditions of Contract for Civil Engineering Construction, 1st Edition, April 1988.

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PART I - GENERAL CONDITIONS

DEFINITIONS AND INTERPRETATION

Definitions

- 1.1 In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:
 - (a) (i) "Employer" means the Independent State of Papua New Guinea which for the purposes of this Contract will be represented by the Secretary of the Department of Works or such person acting in that position from time to time.
 - (ii) "Employer's Delegate" means such person appointed from time to time, in writing, by the Secretary of the Department of Works.
 - (iii) "Contractor" means the person whose tender has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person.
 - (iv) "Sub-Contractor" means any person named in the Contract as a Sub-Contractor for a part of the Works or any person to whom a part of the Works has been sub-contracted with the consent of the Engineer and the legal successors in title to such person, but not any assignee of any such person.
 - (v) "Engineer" means the person appointed by the Employer to act as Engineer for the purposes of the Contract and named as such in Part II of these Conditions.
 - (vi) "Engineer's Representative" means a person appointed from time to time by the Engineer under Sub-Clause 2.2.
 - "Contract" means these Conditions (Parts I and (b) (i) II), the Specification, the Drawings, the Bill Quantities, the Tender, the Letter of Contract Agreement the Acceptance, completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement completed).
 - (ii) "Specification" means the Department of Works Specification for Road and Bridge Works 1978 and amendments thereto included in the Contract and any modification thereof or addition thereto made under Clause 51.

- (iii) "Drawings" means all drawings, and technical information of a like nature provided by the Engineer to the Contractor under the Contract.
- (iv) "Bill of Quantities" means the priced and completed bill of quantities forming part of the Tender.
- (v) "Tender" means the Contractor's priced offer to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance.
- (vi) "Letter of Acceptance" means the formal acceptance by the Employer of the Tender.
- (vii) "Contract Agreement" means the contract agreement (if any) referred to in Sub-Clause 9.1.
- (viii) "Appendix to Tender" means the appendix comprised in the form of Tender annexed to these Conditions.
- (c) (i) "Commencement Date" means the date upon which the Contractor receives the notice to commence issued by the Engineer pursuant to Clause 41.
 - (ii) "Time for Completion" means the time for completing the execution of and passing the Tests on Completion of the Works or any Section or part thereof as stated in the Contract (or as extended under Clause 44) calculated from the Commencement Date.
- (d) (i) "Tests on Completion" means the tests specified in the Contract or otherwise agreed by the Engineer and the Contractor which are to be made by the Contractor before the Works or any Section or part thereof are taken over by the Employer.
 - (ii) "Certificate of Completion" means a certificate issued pursuant to Clause 48.
- (e) (i) "Contract Price" means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provision of the Contract subject to any additions thereto or deductions therefrom as may be made under the provisions hereinafter contained.
 - (ii) "Retention Money" means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 60.2 (a).

- (f) (i) "Works" means the Permanent Works and the Temporary Works or either of them as appropriate.
 - (ii) "Permanent Works" means the permanent works to be executed in accordance with the Contract.
 - (iii) "Temporary Works" means all temporary works of every kind (other than Contractor's Plant) required in or about the execution and completion of the Works and the remedying of any defects therein.
 - (iv) "Contractor's Plant" means all appliances and things of whatsoever nature (other than Temporary Works) required for the execution and completion of the Works and the remedying of any defects therein, but does not include Plant, materials or other things intended to form or forming part of the Permanent works.
 - (v) "Section" means a part of the Works specifically identified in the Contract as a Section.
 - (vi) "Site" means the places provided by the Employer where the Works are to be executed and any other places as may be specifically designated in the contract as forming part of the Site.
- (g) (i) "cost" means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead and other charges properly allocable thereto but does not include any allowance for profit.
 - (ii) "day" means calendar day.
 - (iii) "foreign currency" means a currency of a country other than that of Papua New Guinea.
 - (iv) "writing" means any hand-written, type-written, or printed communication, including telex, cable and facsimile transmission.

- Headings and Marginal Notes
- 1.2 The headings and marginal notes in these Conditions shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract.
- Interpretation 1.3 Words importing persons or parties shall include firms and corporations and any organisation having legal capacity.
- Singular 1.4 Words importing the singular only also include the plural and Plural and vice versa where the context requires.

Motices, 1.5 Consents, Approvals, Certificates and . Determinations Wherever in the Contract provision is made for the giving or issue of any notice, consent, approval, certificate or determination by any person, unless otherwise specified such notice, consent, approval, certificate or determination shall be in writing and the words "notify", "certify" or "determine" shall be construed accordingly.

ENGINEER & ENGINEER'S REPRESENTATIVE

Engineer's 2.1 Duties & Authority

The Engineer shall carry out such duties in issuing decisions, certificates, approvals and orders as are specified in the Contract. In the event of the Engineer being required in terms of his appointment by the Employer to obtain the specific approval of the Employer for the execution of any part of these duties, this shall be set out in Part II of these Conditions.

Except as expressly stated in the Contact, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract.

Engineer's Representative

2.2

The Engineer's Representative shall be responsible to the Engineer and his duties are to watch and supervise the Works and to test and examine any materials to be used or workmanship employed in connection with the Works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor, except as expressly provided hereunder or elsewhere in the Contract, to order any work involving delay or any extra payment by the Employer, nor to make any variations of or in the Works.

The Engineer may from time to time in writing delegate to the Engineer's Representative any of the powers and authorities vested in the Engineer and shall furnish to the Contractor and to the Employer's Delegate a copy of all such written delegations of powers and authorities. Any written instruction or approval given by the Engineer's Representative to the Contractor within the terms of such delegation, but not otherwise, shall bind the Contractor and the Employer as though it had been given by the Engineer. Provided always as follows:-

- (a) Failure of the Engineer's Representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or materials and to order the pulling down, removal or breaking up thereof.
- (b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's Representative he shall be entitled to within 14 days from the date of receipt of such decision refer the matter to the Engineer, who shall thereupon confirm, reverse or vary such decision.

The Engineer shall have authority to revoke at any time any of the powers and authorities delegated to the Engineer's Representative. Any such revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and the Contractor.

Engineer to Act Impartially

2.3

2.4

3.1

4.1

Wherever, under the Contract the Engineer is required to exercise his discretion by giving an opinion, instruction, determination, certificate, valuation or otherwise take any action, which may affect the rights and obligation of the Employer or the Contractor, he shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances.

Engineer's Opinion etc to be Binding

Any such opinion, instruction, determination, certificate, valuation given or action taken by the Engineer as required under Sub-Clause 2.3 shall be communicated in writing by the Engineer to both the Employer's Delegate and the Contractor and shall be binding on both parties. If a dispute arises between the Employer and the Contractor out of such communication either party may refer the matter in dispute for settlement under the provisions of Clause 67. Provided always that unless such dispute shall have been referred to be settled under the provisions of Clause 67 within a period of not more than 21 days from the time of receipt of the Engineer's communication, the opinion, instruction, certificate, determination. valuation or communicated by the Engineer shall be considered final and binding on the Employer and the Contractor.

ASSIGNMENT AND SUB-LETTING

Assignment of Contract

The Contractor shall not assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by a charge in favour of the Contractor's bankers of any monies due or to become due under this Contract, without the prior written consent of the Employer.

Sub-Contracting

The Contractor shall not sub-let the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not sub-let any part of the Works without the prior written consent of the Engineer, which shall not be unreasonably withheld, and such consent, if given, shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Provided always that the provision of labour on a piecework basis shall not be deemed to be a sub-letting under this Clause.

CONTRACT DOCUMENTS

Language

- 5.1 (a) The language in which the contract shall be drawn up shall be the English language.
 - (b) The Contract is subject to and shall be interpreted in accordance with the law at the time being in force in Papua New Guinea and the Employer and the Contractor hereby submit to the jurisdiction of the National Court of Justice of Papua New Guinea.
 - (c) All reference to Acts and Regulations in this Contracts shall be deemed to be a reference to the Acts or Regulations for the time being in force in Papua New Guinea.

Documents Mutually Explanatory

Except if and to the extent otherwise provided by the 5.2. Contract, the provisions of the Conditions of Contract Parts I and II shall prevail over those of any other document forming part of the Contract. Subject to the foregoing, the several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the Contractor instructions thereon. Provided always that if, in the opinion of the Engineer, compliance with any such instructions shall involve the Contractor in any cost, which by reason of any such ambiguity or discrepancy could not reasonably have been foreseen by the Contractor, the Engineer shall certify and the Employer shall pay such additional sum as may be reasonable to cover such costs.

Custody of Drawings & Documents

6.1 The Drawings, Specifications and Contract Documents shall remain in the sole custody of the Engineer, but two copies thereof shall be furnished to the Contractor free of charge. The Contractor shall provide and make at his own expense any further copies required by him. At the completion of the Contract the Contractor shall return to the Engineer all Drawings, Specifications and Documents provided under the Contract.

One Copy of Drawings to be Kept on Site

6.2 One copy of the Drawings, furnished to the Contractor as aforesaid, shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and the Engineer's Representative and by any other person authorised by the Engineer in writing.

Disruption of Progress

The Contractor shall give written notice to the Engineer, with a copy to the Employer's Delegate whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

Delays & Cost of Delay of Drawings

6.4

8.2

If, by reason of any failure or inability of the Engineer to issue within a time reasonable in all the circumstances any drawing or order requested by the Contractor in accordance with Sub-Clause 6.3, the Contractor suffers delay and/or incurs costs then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 hereof and the Contractor shall be paid the amount of such cost as shall be certified by the Engineer.

Supplementary Drawings and Instructions

7.1 The Engineer shall have full power and authority to supply to the Contractor from time to time, during the progress of the Works, such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works. The Contractor shall carry out and be bound by the same.

GENERAL OBLIGATIONS

Contractor's General Responsibilities

8.1 The Contractor shall, subject to the provision of the Contract, and with due care and diligence, execute, complete and maintain the Works in accordance with the provisions of the Contract and provide all labour, including the supervision thereof, materials, Contractors Plant and all other things, whether of a temporary or permanent nature, required in and for such execution and maintenance, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

Site Operations and Methods of Construction

The Contractor shall take full responsibility for the safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works, or for the design or specification of any Temporary Works prepared by the Engineer.

Contract Agreement

9.1 The Contractor shall when called upon so to do enter into and execute a Contract Agreement, to be prepared and completed at the cost of the Employer, in the form annexed with such modification as may be necessary.

Performance - Security

The Contractor shall provide a Bond or Guarantee of a Bank or Insurance Company registered in Papua New Guinea to be jointly and severally bound with the Contractor to the Employer in a sum equal to the percentage (stated in the Appendix to the Tender) of the Tender Sum for the due performance of the Contract under the terms of a Bond or such other amount as stated in the Appendix to the Tender, whichever is the greater. The Bank or Insurance Company and the terms of the Bond shall be such as shall be approved by the Employer. The Bond shall remain in force until the issue of the Maintenance Certificate for the whole Works. The obtaining of the Bond or Guarantee and the cost of the Bond or Guarantee to be so entered into shall be included in the Contract Price.

The Contractor shall provide the Bond within 30 days of receipt by him of the Letter of Acceptance.

Inspection of Site

11.1

12.1

The Employer shall have made available to the Contractor, before the submission of the Tender, data on hydrological and sub-surface conditions as shall have been obtained by or on behalf of the Employer from investigations undertaken relevant to the Works and the Tender shall be deemed to have been based on such data, but the Contractor shall be responsible for his own interpretation thereof.

The Contractor shall also be deemed to have inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his Tender, as to the form and nature thereof, including the sub-surface conditions, hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the Works, the means of access to the Site and the accommodation he may require and, in general, shall be deemed to have obtained all necessary information, subject as above mentioned, as to risks, contingencies and all other circumstances which may influence or affect his Tender.

Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the Works and of the rates and prices stated in the priced Bill of Quantities and the Schedule of Rates and Prices, if any, which Tender rates and prices shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and maintenance of the Works. If, however, during the execution of the Works the Contractor shall encounter physical conditions, other than climatic conditions on the Site, or artificial obstructions, which conditions or obstructions could, in his opinion, not have been reasonably foreseen by an experienced contractor, the Contractor shall forthwith give written notice thereof to the Engineer's Representative and, if in the opinion of the Engineer, such conditions or artificial obstructions could not have been reasonably foreseen by an experienced contractor, then the Engineer shall certify and the Employer shall pay the additional cost to which the shall have been put by reason of such Contractor conditions, including the proper and reasonable cost:

(a) of complying with any instruction which the Engineer may issue to the Contractor in connection therewith,

or

(b) of any proper and reasonable measures approved by the Engineer which the Contractor may take in the absence of specific instructions from the Engineer.

As a result of such conditions or obstructions being encountered.

Provided however that the Contractor shall not be entitled to recover any such costs unless he has given written notice of his intention to claim, to the Engineer, within 14 days of the Engineer's instruction or approval given under Sub-Section (a) or (b) of this Clause.

Work to the Satisfaction of Engineer

13.1

14.1

Unless it is legally or physically impossible, the Contractor shall execute, complete and maintain the Works in strict accordance with the Contract to the satisfaction of the Engineer. The Contractor shall comply with and adhere strictly to the Engineer's instructions and directions on any matter whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions and directions only from the Engineer or, subject to the limitations referred to in Clause 2 hereof, from the Engineer's Representative.

Programme to be Submitted

The Contractor shall, within the time stated in the Appendix to the Form of Tender after the date of Acceptance, submit to the Engineer for his consent a programme, in such form and detail as the Engineer shall reasonably prescribe, for the execution of the Works. The Contractor shall, whenever required by the Engineer, also provide in writing for his information a general description of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works.

Revised Programme 14.2

If at any time it should appear to the Engineer that the actual progress of the Works does not conform to the programme to which consent has been given under Sub-Clause 14.1, the Contractor shall produce, at the request of the Engineer, a revised programme showing the modifications to such programme necessary to ensure completion of the Works within the Time for Completion.

Cash Flow Estimated to be Submitted

14.3 The Contractor shall, within the time stated in the Appendix to the Form of Tender after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate, in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer.

Contractor not 14.4 Relieved of Duties or Responsibilities

The submission to and consent by the Engineer of such programmes or the provision of such general description or cash flow estimates shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

Consequence of 14.5 Late Submission

Should the Contractor not submit the programme within the time stated in Sub-Clause 14.1 or the cash flow estimate within the time stated in Sub-Clause 14.3, the Engineer shall be entitled to delay the issue of the notice to commence the Works required by Clause 41.1. Failure of the Contractor to submit a revised programme as requested by the Engineer under Sub-Clause 14.2 or revised cash flow estimates as required by the Engineer under Sub-Clause 14.3, within 14 days of any such requirement being

notified by the Engineer to the Contractor, shall entitle the Engineer, at his sole discretion, to withhold certification of the Contractor's monthly statements submitted in accordance with Sub-Clause 60.1 until such programme or estimate has been furnished by the Contractor to the Engineer's satisfaction.

Contractor's Superintendence

15.1

The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary. Such superintendence shall be given by sufficient persons having adequate knowledge of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and, methods of preventing accidents) as may be requisite for the satisfactory construction of the Works.

Contractor to Authorise Agent

The Contractor, or a competent and authorised agent approved of in writing by the Engineer, (which approval may at any time be withdrawn), is to be constantly on the site of the Works and shall give his whole time to the superintendence of the same. Such authorised agent shall be a registered engineer as defined in Part I of the Professional Engineers (Registration) Act 1986 and shall be in full charge of the Works and shall be responsible for the safety of all operations. The authorised agent shall be fluent in the English language and receive on behalf of the Contractor, directions, instructions and approvals from the Engineer or, subject to the limitations of Clause 2 hereof, from the Engineer's Representative.

Contractor to Name Representative

The Contractor shall name in writing to the Engineer with 15.3 a copy to the Employer's Delegate, the person who for the purposes of the Contract shall be his duly authorised representative. Such representative shall be a registered engineer as defined in Part I of the Professional Engineer's (Registration) Act 1986, be fluent in the English language and be approved of in writing by the Engineer, which approval shall not be unreasonably The Contractor's Representative shall have withdrawn. full power to act for and on behalf of the Contractor and to receive and submit notices, claims for additional costs or extensions of time, agree variations of rates or prices and in any other way represent, or act for, the Contractor on matters relating to or arising out of the Contract, other than matters relating to superintendence of the Works.

Replacement of Agent or Representative

15.4

If the approval for the Contractor's agent or representative shall at any time be withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereafter mentioned, after receiving written notice of such withdrawal, remove the agent or representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him with another agent or representative, as the case may be, approved of in writing by the Engineer.

Contractor's Employees

- 16.1 The Contractor shall provide and employ on the Site in connection with the execution and maintenance of the Works:
 - (a) only such technical assistants as are skilled and experienced in their respective callings and such sub-agents, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and
 - (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the Works.

Engineer at Liberty to Object

16.2.

16.3

The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or maintenance of the Works who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be again employed upon the Works without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as possible by a competent substitute approved by the Engineer.

Language Ability of Contractor's Employees

A reasonable portion of the Contractor's skilled and technical staff shall have working knowledge of the English language, or the Contractor shall have available on site at all times a sufficient number of competent interpreters to ensure the proper transmission and understanding of instruction and information.

Setting-out

- 17.1 The Contractor shall be responsible for:
 - (a) the accurate setting-out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing,
 - (b) the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of the Works, and
 - (c) the provision of all necessary instruments, appliances and labour in connection with the foregoing responsibilities.

If, at any time during the execution of the Works, any error appears in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer, unless such error is based on incorrect data supplied in writing by the Engineer, in which case the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer's Delegate.

The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy thereof and the Contractor shall carefully protect and preserve all benchmarks, sight-rails, pegs and other things used in settingout the Works.

Boreholes and Exploratory Excavation

18.1

19.1

If, at any time during the execution of the Works the Engineer requires the Contractor to make exploratory excavation, such requirement shall be the subject of an instruction in accordance with Clause 51, unless an item or a Provisional Sum, in respect of such work, is included in the Bill of Quantities.

Safety, Security and Protection of the Environment

The Contractor shall, throughout the execution and completion of the works and the remedying of any defects therein:

(a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site and the Works (so far as the same are not completed) in an orderly state appropriate to the avoidance of danger to such persons,

and

(b) Take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance, to persons, or to property of the public, or others, resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

Employer's Responsibilities

- 19.2 If under Clause 31 the Employer shall carry out work on the Site with his own workmen he shall, in respect of such work:
 - (a) have full regard to the safety of all persons entitled to be upon the Site,

and

(b) keep the Site in orderly state appropriate to the avoidance of danger to such persons.

If under Clause 31 the Employer shall employ other contractors on the Site he shall require them to have the same regard for safety and avoidance of danger.

Watching and Lighting

19.3 The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or the Engineer's Representative, or by any duly constituted authority, for the protection of the Works, or for the safety and convenience of the public or others.

Care of Works

20.1

From the commencement of the Works until the date stated in the Certificate of Completion, for the whole of the Works pursuant to Clause 48 hereof, the Contractor shall take full responsibility for the care thereof. Provided if the Engineer shall issue a Certificate of Completion in respect of any part of the Permanent Works, the Contractor shall cease to be liable for the care of that part of the Permanent Works from the date stated in the Certificate of Completion in respect of that part, and the responsibility for the care of that part shall pass to the Employer. Provided further that the Contractor shall take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the Period of Maintenance until such outstanding work is In case any damage, loss or injury shall completed. happen to the Works, or to any part thereof, from any cause whatsoever, save and except the excepted risks as defined in Sub-Clause 20.2, while the Contractor shall be responsible for the care thereof, the Contractor shall, at his own cost, repair and make good the same, so that at completion the Permanent Works shall be in good order and condition and in conformity in every respect with the requirements of the Contract and the Engineer's instructions. In the event of any such damage, loss or injury happening from any of the excepted risks, the Contractor shall, if and to the extent required by the

Engineer and subject always to the provisions of Clause 65 hereof, repair and make good the same as aforesaid at the cost of the Employer. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of completing any outstanding work or complying with his obligations under clauses 49 or 50 hereof.

Excepted Risks

20.2 The "excepted risks" are

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;
- (b) rebellion, revolution, insurrection, or military or usurped power, civil war;
- (c) riot commotion or disorder unless solely restricted to employees of the Contractor, or of his Subcontractors, and arising from the conduct of the Works;
- (d) a cause solely due to the Engineer's design of the Works;
- (e) ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive, or other hazardous properties of any explosive, nuclear assembly or nuclear component thereof;

- (f) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds;
- (g) any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for, or insure against.

Insurance of Works, etc

21.1

- Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure in the joint names of the Employer and the Contractor against all loss or damage from whatever cause arising, other than the excepted risks, for which he is responsible under the terms of the Contract, and in such manner that the Employer and Contractor are covered for the period stipulated in Sub-Clause 20.1 hereof and are also covered during the Period of Maintenance, for loss or damage arising from a cause, occurring prior to the commencement of the Period of Maintenance, and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50 hereof:-
 - (a) The Works for the time being executed to the estimated current contract value thereof, or such additional sum as may be specified in Part II in the Clause numbered 21, together with the materials for incorporation in the Works at their replacement value.

and

(b) The Contractors Plant and other things, brought on to the Site by the Contractor, to the replacement value of such Contractors Plant and other things.

Such insurance shall be effected with an insurer registered in Papua New Guinea and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer or the Employer's Delegate the policy or policies of insurance and the receipts for payment of the current premiums.

Damage to Persons 22.1 and Property

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of injuries or damage to any person or material or physical damage to any property whatsoever, which may arise out of or in consequence of the execution and maintenance of the Works, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of, or in relation thereto, except any compensation or damages for or with respect to:-

(a) The permanent use or occupation of land by the Works or any part thereof.

- (b) The right of the Employer to execute the Works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property which are the unavoidable result of the execution or maintenance of the Works in accordance with the Contract.
- (d) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the Contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the Employer, his servants or agents or other contractors, for the damage or injury.

Indemnity by Employer

22.2 The Employer shall indemnify the Contractor against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the proviso to Sub-Clause 22.1.

Third Party Insurance

23.1 Before commencing the execution of the Works the Contractor, but without limiting his obligations and responsibilities under Clause 22 hereof, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the Employer, or to any person, including any employee of the Employer, by or arising out of the execution of the Works or in the carrying out of the Contract, otherwise than due to the matters referred to in the proviso to Sub-Clause 22.1.

Minimum Amount Third Party Insurance

23.2

24.1

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount stated in the Appendix to the Tender. The Contractor shall, whenever required, produce to the Engineer or the Employer's Delegate, the policy or policies of insurance and the receipts for payment of the current premiums.

Provision to 23.3 Indemnify Employer

The terms shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy being brought or made against the Employer, the insurer will indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.

Accident or Injury to Workmen

The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor, save and except an accident or injury resulting from any act of default of the Employer, his agents, or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and

compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

Insurance Against Accidents etc to Workmen

24.2

25.1

26.2

26.3

The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him on the Works and shall, when required, produce to the Engineer or the Employer's Delegate such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub-contractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy, but the Contractor shall require such subcontractor to produce to the Engineer or the Employer's Delegate, when required, such policy of insurance and the receipt for the payment of the current premium.

Remedy on Contractor's Failure to Pay

If the Contractor shall fail to effect and keep in force the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, then in any such case the Employer may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for the purpose and from time to time deduct the amount, so paid by the Employer as aforesaid, from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

Giving of Notices 26.1 & Payment of Fees

The Contractor shall give all notices and pay all fees required to be given or paid by any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted authority in relation to the execution of the Works and by the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way, by the Works.

Compliance with Statutes, Regulations etc

The Contractor shall conform in all respects with the provisions of any such Statute, Ordinance or Law as aforesaid and the regulations or bye-laws of any local or other duly constituted authority which may be applicable to the Works and with such rules and regulations of public bodies and companies as aforesaid and shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law.

Reimbursment of Pees

The Employer will repay, or allow to the Contractor all such sums as the Engineer shall certify to have been properly payable and paid by the Contractor in respect of such fees.

Fossils, etc

27.1

28.1

28.3

All fossils, artifacts, articles of value or antiquity and structures and other remains, or things of geological or archaeological interest discovered on the site of the Works shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer. The Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and, before removal, acquaint the Employer's Delegate of such discovery and carry out, at the expense of the Employer, the Employer's Delegate's orders as to the disposal of the same.

Patent Rights

The Contractor shall save harmless and indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark, or name, or other protected rights, in respect of any Contractor's Plant, machine, work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or any parts thereof.

Royalties

28.2 Notwithstanding the requirements of Sub-Clause 28.1, the Employer shall carry out all negotiations for obtaining permits and pay all royalties for the Contractor to obtain stone, sand, gravel or Borrow required for the construction of the Works from Borrow pits nominated in the Contract.

Borrow Pits not Nominated

Subject to the Engineer's written approval, should the Contractor wish to obtain stone, sand, gravel or Borrow from locations other than those nominated in the Contract he shall give written notice to the Employer at least 91 days prior to his requirement to use such other locations, together with complete details of his intentions including the precise location of the site, the names of owners of that land and the description and estimated quantity of the materials required. In such cases the employer shall use his best endeavour, to carry out negotiations with owners but shall not be held responsible for failure, to obtain permits for the extraction of materials. Contractor shall pay to the Employer the amount of royalty payments for such materials. Under no circumstances shall the Contractor attempt to negotiate for the use of such sites, or for the amount of royalties to be paid, directly with the land owners if such land is designated as Customary Land. If the Contractor contravenes any of the requirements of this Sub-Clause the Employer may exercise his remedies under Clause 63.1 of these Conditions.

Interference 29.1 with Traffic & Adjoining Properties

All operations necessary for the execution of the Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the convenience of the public, or the access to, use and occupation of public or

private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall save harmless and indemnify the Employer in respect of all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of, or in relation to, any such matters in so far as the Contractor is responsible therefor.

Extraordinary Traffic

30.1

30.3

The Contractor shall use every reasonable means to prevent any of the highways or bridges communicating with or on the routes to the Site from being damaged or injured by any traffic of the Contractor or any of his subcontractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and material from and to the Site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such highways and bridges.

Special Loads

30.2 Should it be found necessary for the Contractor to move one or more loads of Contractor's Plant, machinery or preconstructed units or parts of units of work over part of a highway or bridge, the moving whereof is likely to damage highway or bridge unless special protection or any strengthening is carried out, then the Contractor shall before moving the load on to such highway or bridge give notice to the Engineer and Employer's Delegate of the weight and other particulars of the load to be moved and his proposals, and estimation of cost, for protecting or strengthening the said highway or bridge. Unless within fourteen days of the receipt of such notice the Employer shall by counter-notice direct that such protection or strengthening is unnecessary, then the Contractor will carry out such proposals, or any modification thereof that the Engineer shall require and, unless there is an item or are items in the Bill of Quantities for pricing by the Contractor of the necessary works for the protection or strengthening aforesaid, the costs thereof shall be paid by the Employer to the Contractor.

Settlement of Extraordinary Traffic claims

If during the execution of the Works or at any time thereafter the Contractor shall receive any claim arising out of the execution of the Works in respect of damage or injury to highways or bridges he shall immediately report the same to the Engineer and thereafter the Employer shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto. Provided always that if and so far as any such claims or part thereof shall in the opinion of the Engineer be due to any failure on the part of the Contractor to observe and perform his obligations under Sub-Clauses 30.1 and 30.2, then the amount certified by the Engineer to be due to such failure shall be paid by the Contractor to the Employer.

Waterborne Traffic

Where the nature of the Works is such as to require the use by the Contractor of waterborne transport the foregoing provisions of this Clause shall be construed as though "highway" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.

Opportunities for 31.1 Other Contractors

30.4

32.1

33.1

33.2

The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works. If, however, the Contractor shall, on the written request of the Engineer or the Employer's Delegate, make available to any such contractor, or to the Employer or any such other authority, any roads or ways for the maintenance of which the Contractor is responsible, or permit the use by any such of the Contractor's scaffolding or other plant on the Site, or provide any other service of whatsoever nature for any such, the Employer shall pay to the Contractor in respect of such use or service such sum or sums as shall, in the opinion of the Engineer, be reasonable.

Contractor to Keep Site Clear

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

Clearance of Site on Completion

On the completion of the Works the Contractor shall at his own cost clear away and remove from the site all constructional plant, surplus materials, rubbish and Temporary Works of every kind, and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer.

Clearing to Include

Notwithstanding the requirements of Sub-Clause 33.1 the Contractor shall carry out the Engineer's Representative's instructions to cut or trim all grass, or vegetation of any kind, found on the site. The cost for this operation shall have been included in the Contractor's Tender Price for the Works.

Failure of Clear 33.3

Failure on the part of the Contractor to carry out and complete his obligations under this Clause, within 28 days after receiving the Engineer's instructions to commence such work as required by this Clause, shall entitle the Employer to have such work carried out by others on his behalf and withold the cost thereof from any monies which remain outstanding to be paid to the Contractor, or if such monies are insufficient the Employer shall be entitled to deduct such cost from the amount of retention monies held by the Employer.

LABOUR

| | | ************************************** |
|--|------|---|
| Engagement of Labour | 34.1 | The Contractor shall make arrangements for the engagement of all labour, local or otherwise, and insofar as the Contract otherwise provides, for the transport, housing, feeding and payment thereof. |
| Rates of Wages & Conditions of of Labour | 34.2 | The Contractor shall pay rates of wages and observe Conditions of labour not less favourable than those established under the Industrial Relations Act of 1962 (as amended from time to time) of Papua New Guinea. |
| Recruitment | 34.3 | The Contractor shall not recruit or attempt to recruit his staff or labour from amongst persons in the service of the Employer, the Engineer, or the Engineer's Representative. |
| Compliance with Labour Regulations | 34.4 | The Contractor shall observe all statutes, Acts, Ordinances, By-Laws and Government Regulations or Orders at the time being in force concerning the employment, training and payment of local labour and expatriate workers and staff. The Contractor's attention is also drawn to his obligation to maintain such statistical data as is necessary to complete the annual employment returns in accordance with the requirement of the Employment Statistics Act - 1971. |
| Housing for Labour | 34.5 | The Contractor shall provide and maintain such accommodation and amenities as he may consider necessary for all his staff and labour, employed for the purposes of or in connection with the Contract, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire fighting equipment, cookers, refrigerators, furniture and other requirements in connection with such accommodation or amenities. On completion of this Contract, unless otherwise agreed with the Employer, the temporary camps/housing provided by the Contractor shall be removed and the site reinstated to its original condition, all to the approval of the Engineer. |
| Supply of Foodstuffs | 34.6 | The Contractor shall arrange for the provision of a sufficient supply of suitable food at reasonable prices for all his staff and labour, or his sub-contractors for the purposes of or in connection with this Contract. |
| Supply of Water | 34.7 | The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of his staff and labour. |

Shelters and Facilities

34.8 The Contractor shall provide such shelters, sanitary and first aid facilities as may reasonably be required having regard to, the numbers in his workforce and such Statutes, Acts, Ordnance, By-Law, Government Regulations or Orders, as may be in force from time to time in Papua New Guinea. The Contractor shall have on his staff at the site an officer dealing with questions regarding the safety and protection against accidents of all staff and labour. The officer shall be qualified for this work and shall take protective measures to prevent accidents. The Contractor shall also make available the facilities of first aid to the Engineer and his staff members.

Measures Against Insect and Pest Muisance

34.9 The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the site from insect nuisance and other pests and reduce the dangers to health and the general nuisance occasioned by the same. The Contractor shall provide his staff and labour with suitable prophylactics for the prevention of malaria and take steps to prevent the formation of stagnant pools of water. He shall comply with all the regulations of the local health authorities in these respects and shall, in particular, arrange to spray thoroughly, with approved insecticide, all buildings erected on the site. Such treatment shall be carried out at least once a year or as instructed by the Engineer.

Epidemics

34.10 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 the same.

Payment of Salaries & Wages

34.11 Before payment of monies due to the Contractor by the Employer under this Contract the Employer will require from the Contractor a signed statement or statutory declaration that all employees engaged on the Works by the Contractor have been paid their salaries or wages and claims of every kind in full and to the latest date on which salaries or wages and claims are due.

Failure to Pay

34.12 If the Contractor fails or omits to pay salaries or wages and entitlements of his employees, then the Employer may upon satisfactory evidence of such failure or omission being presented to the Employer by the Engineer, pay the amount of such salaries or wages or entitlements to the Contractors employee or employees as the case may be and deduct the amount so paid from any monies due or thereafter become due to the Contractor under this Contract.

Burial of the Dead

34.13 The Contractor shall make all necessary arrangements for the transport, to any place required for burial, of any of his expatriate employees or members of their families who may die in Papua New Guinea. The Contractor shall also be responsible, to the extent required by local custom, for making arrangements for burial of any of his local employees who may die while engaged upon the Works.

Repatriation of Employees

34.14 The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of such persons that he recruited and employed for the purposes of or in connection with the Contract and shall maintain such persons as are to be so returned in a suitable manner until they shall have left the site or, in the case of persons who are not nationals of, and have been recruited outside of, Papua New Guinea shall have left Papua New Guinea. Should the Contractor fail to carry out his obligations under this Sub-Clause, the Employer may repatriate and maintain such persons and recover the costs therefore from the Contractor.

Alcohol & Drugs

34.15 The Contractor shall not import, sell, barter or otherwise dispose of any alcoholic liquor, drugs or prohibited imports, or permit or suffer any such importation, sale, gift, barter, or disposal, by any of his Sub-Contractors, representatives, agents, staff or labour.

Arms or Ammunitions

34.16 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.

Festivals and Religious Customs

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

Disorderly Conduct 34.18 The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his staff and labour and for the preservation of peace and protection of persons engaged on the Works and of persons and property in the neighbourhood of the Works against the same.

Observance by Sub-Contractors

34.19 The Contractor shall be responsible for observance by his Sub-Contractors of the foregoing requirements.

Returns of Labour, etc

The Contractor shall, if required by the Engineer, deliver 35.1 to the Engineer's Representative, or at his office, a return in detail in such form, and at such intervals as the Engineer may prescribe, showing the supervisory, staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Contractor's Plant as Engineer's Representative may require.

Records of Safety and Health

35.2 The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons or damage to property as the Engineer may, from time to time, require.

Accident Reports

Contractor shall report to the 35.3 The Representative details of any accident as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall also notify the Engineer immediately by the quickest available means.

MATERIALS AND WORKMANSHIP

Quality of Materials, Workmanship and Tests

36.1

All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site, or at such other place or places as may be specified in the Contract, or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials, before incorporation in the Works, for testing as may be selected and required by the Engineer.

Cost of Samples

36.2 All samples shall be supplied by the Contractor at his own cost.

Cost of Tests

36.3 The cost of making any test shall be borne by the Contractor, if such test is clearly intended by, or provided for in the Contract and, in the cases only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purpose which it was intended to fulfil, is particularised in the Contract in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

Cost of Test not Provided for

36.4 If any test is ordered by the Engineer which is either

(a) not so intended by or provided for,

or

(b) (in the cases above mentioned) is not so particularised,

or

(c) though so intended or provided for is ordered by the Engineer to be carried out by an independent person at any place other than the Site or the place of manufacture or fabrication of the materials tested.

Then the cost of such test shall be borne by the Contractor, if the test shows the workmanship or materials not to be in accordance with the provisions of the Contract or the Engineer's instructions, but otherwise by the Employer.

Inspection of Operations

37.1 The Engineer and any person authorised by him shall at all times have access to the Works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for, and every assistance in, obtaining the

right to such access.

Examination of Works before Covering up

38.1 No work shall be covered up or put out of view without the approval of the Engineer or the Engineer's Representative and the Contractor shall afford full for opportunity the Engineer the Engineer's or Representative to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer's Representative whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer or the Engineer's Representative shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations.

Uncovering and Making Openings

38.2 The Contractor shall uncover any part or parts of the Works or make openings in or through the same as the Engineer may from time to time direct and shall reinstate and make good such part or parts to the satisfaction of the Engineer. If any such part or parts have been covered up, or put out of view, after compliance with the requirement of Sub-Clause 38.1 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating and making good the same shall be borne by the Employer, but in any other case all costs shall be borne by the Contractor.

Removal of Improper Works and Materials

- 39.1 The Engineer shall during the progress of the Works have power to order in writing from time to time:
 - (a) the removal from the Site, within such time or times as may be specified in the order, of any materials which, in the opinion of the Engineer, are not in accordance with the Contract,

and

(b) the substitution of proper and suitable materials,

and

(c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which in respect of materials or workmanship is not, in the opinion of the Engineer, in accordance with the Contract.

Default of Contractor in Compliance

39.2 In case of default on the part of the Contractor in carrying out such order, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon, or incidental thereto, shall be recoverable from the Contractor by the Employer, or may be deducted by the Employer from any monies due or which may become due to the Contractor.

SUSPENSION

Suspension of Work

- The Contractor shall, on the written order of the Engineer, suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work, so far as is necessary in the opinion of the Engineer. The extra cost incurred by the Contractor in giving effect to the Engineer's instructions under this Clause shall be borne and paid by the Employer unless such suspension is:
 - (a) otherwise provided for in the Contract,

or

40.1

(b) necessary by reason of some default on the part of the Contractor,

or

(c) necessary by reason of climatic conditions on the Site,

or

(d) necessary for the proper execution of the Works or for the safety of the Works or any part thereof, insofar as such necessity does not arise from any act or default by the Engineer or the Employer, or from any of the excepted risks defined in Clause 20 hereof.

Provided that the Contractor shall not be entitled to recover any such extra cost unless he gives written notice of his intention to claim to the Engineer within 14 days of the date of the Engineer's order. The Engineer shall settle and determine such extra payment and/or extension of time under Clause 44 hereof to be made to the Contractor in respect of such claim as shall, in the opinion of the Engineer, be fair and reasonable.

Suspension Lasting 40.2 more than 84 Days

If the progress of the Works or any part thereof is suspended on the written order of the Engineer and if permission to resume work is not given by the Engineer within a period of eighty-four days from the date of suspension then, unless such suspension is within paragraph (a), (b), (c) or (d) of Sub-Clause 40.1, the Contractor may serve a written notice on the Engineer requiring permission within twenty-eight days from the receipt thereof to proceed with the Works, or that part thereof in regard to which progress is suspended and, if such permission is not granted within that time, the Contractor by a further written notice so served may, but is not bound to, elect or treat the suspension where it affects part only of the Works as an omission of such part under Clause 51 hereof, or, where it affects the whole Works, as an abandonment of the Contract by the Employer.

COMMENCEMENT TIME AND DELAYS

Commencement of Works

The Contractor shall commence the Works on Site within twenty-eight days after the receipt by him of a written order to this effect from the Engineer and shall proceed with the same with due expedition and without delay, except as may be expressly sanctioned or ordered by the Engineer, or be wholly beyond the Contractor's control.

No Commencement 41.2 Until Completion of Engineer's Office etc.

41.1

No works other than Temporary Works shall be commenced on site until such time as the Contractor has constructed and furnished the Engineer's Office and Laboratory and has provided the vehicles for the use of the Engineer and his staff if specified in the Contract. Any delay suffered by the Contractor in such a case shall not entitle him to an extension of time under Clause 44.

Possession of Site 42.1

Save insofar as the Contract may prescribe, the extent of portions of the Site of which the Contractor is to be given possession from time to time and the order in which such portions shall be made available to him and, subject to any requirements in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the execution of the Works in accordance with the programme referred to in Clause 14 hereof, if any, and otherwise in accordance with such reasonable proposals of the Contractor as he shall, by written notice to the Engineer, make and will, from time to time as the Works proceed, give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the execution of the Works with due despatch in accordance with the said programme or proposals, as the case may be. If the Contractor suffers delay or incurs cost from failure on the part of the Employer to give possession in accordance with the terms of this Clause, the Engineer shall grant an extension of time for the completion of the Works and certify such sum as, in his opinion, shall be fair to cover the cost incurred, which sum shall be paid by the Employer.

Access

42.2 The Contractor shall bear all costs and charges for special or temporary works required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purposes of the Works.

Time for Completion

43.1 Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 48 hereof, within the time stated in the Contract, calculated from the Commencement Date as defined in Sub-Clause 1.1 (c) (i) of these Conditions, or such extended time as may be allowed under Clause 44 hereof.

Extension of Time for Completion

44.1

Should the amount of extra or additional work of any kind or any cause of delay referred to in these Conditions, or exceptional adverse climatic conditions, or other special circumstances of any kind whatsoever which may occur, other than through a default of the Contractor, be such as fairly to entitle the Contractor to an extension of time for the completion of the Works, the Engineer shall determine the amount of such extension and shall notify the Employer's Delegate and the Contractor accordingly. Provided that the Engineer is not bound to take into account any extra or additional work or adverse climatic conditions or other special circumstances unless the Contractor has within twenty-eight days after such work has been commenced, or such circumstances have arisen, to the Engineer's Representative full and submitted detailed particulars of any extension of time to which he consider himself entitled in order that such submission may be investigated at the time.

No Night or Sunday Work

45.1 Subject to any provision to the contrary contained in the Contract, none of the Permanent Works shall, save as hereinafter provided, be carried on during the night or on Sundays, without the permission in writing of the Engineer's Representative, except when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer's Representative. Provided always that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by rotary or double shifts.

Rate of Progress

If for any reason, which does not entitle the Contractor 46.1 to an extension of time, the rate of progress of the Works, or any section, is at any time, in the opinion of the Engineer, too slow to ensure completion by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the shall thereupon take such steps as are Contractor necessary, and the Engineer may approve, to expedite progress so as to complete the Works or such section by the prescribed time or extended time. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor shall seek the Engineer's permission to do any Permanent Work at night or Sundays, such permission may be granted at the discretion of the Engineer. If the Employer incurs any additional costs for supervision due to the Contractor working on Sundays or overtime, such costs shall be certified by the Engineer and deducted from any monies due to the Contractor under Clause 60.3.

Liquidated Damages for Delay

47.1 If the Contractor shall fail to achieve completion of the Works within the time prescribed by Clause 43 hereof, then the Contractor shall pay to the Employer the sum stated in the Contract as liquidated damages for such default and not as a penalty for every day or part of a day which shall elapse between the time prescribed by Clause 43 hereof and the date of certified completion of the Works. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies, due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works, or from any other of his obligations and liabilities under the Contract.

Certificate of Completion of Works

48.1

When the whole of the Works have been substantially completed and satisfactorily passed any final test that may be prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer or to the Engineer's Representative accompanied by an undertaking to finish any outstanding work during the Period of Such notice and undertaking shall be in Maintenance. writing and shall be deemed to be a request by the Contractor for the Engineer to issue a Certificate of Completion in respect of the Works. The Engineer shall, within twenty-one days of the date of delivery of such notice either issue to the Contractor, with a copy to the Employer's Delegate a Certificate of Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, in writing to the Contractor give instructions specifying all the work which, in the Engineer's opinion, requires to be done by the Contractor before the issue of The Engineer shall also notify the such Certificate. defects in the Works affecting Contractor of any completion that may appear after such substantial instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Certificate of Completion within twenty-one days of completion, to the satisfaction of the Engineer, of the so specified and making good any defects so Works notified.

Certificate of Completion by Stages

- 48.2 Similarly, in accordance with the procedure set out in Sub-Clause 48.1, the Contractor may request and the Engineer shall issue a Certificate of Completion in respect of :-
 - (a) any section of the Permanent Works in respect of which a separate time for completion is provided in the Contract and
 - (b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and occupied, or used by, the Employer.

Substantial Completion of Parts

48.3 If any part of the Permanent Works shall have been substantially completed and shall have satisfactorily passed any final test that may be prescribed by the Contract, the Engineer may issue a Certificate of Completion in respect of that part of the Permanent Works before completion of the whole of the Works, and upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete any outstanding work in that part of the Works within the period specified by the Engineer in such Certificate.

Surfaces Requiring 48.4 Reinstatement

Provided always that a Certificate of Completion given in respect of any section or part of the Permanent Works before completion on the whole shall not be deemed to certify completion of any ground or surfaces requiring reinstatement, unless such Certificate shall expressly so state.

MAINTENANCE AND DEFECTS

Definition of "Period of Maintenance"

49.1 In these Conditions the expressions "Period of Maintenance" shall mean the period of maintenance named in the Appendix to the Tender, calculated from the date of completion of the Works, certified by the Engineer in accordance with Clause 48 hereof, or, in the event of more than one certificate having been issued by the Engineer under the said Clause, from the respective dates so certified and in relation to the Period of Maintenance the expression "the Works" shall be construed accordingly.

Execution of Work of Repair, etc

49.2 To the extent that the Works shall at or as soon as practicable after the expiration of the Period of Maintenance be delivered to the Employer in the condition required by the Contract, fair wear and tear excepted, to the satisfaction of the Engineer, the Contractor shall finish the work, if any, outstanding at the date of completion, as certified under Clause 48 hereof, as soon as practicable after such date and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer within the period specified by the Engineer.

Cost of Execution of Work of Repair, etc

49.3 All such work shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer, be due to the use of materials or workmanship not in accordance with the Contract, or to neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract. If, in the opinion of the Engineer, such necessity shall be due to any other cause, the value of such work shall be ascertained and paid for as if it were additional work.

Remedy on Contractors Failure to Carry Out Work Required

49.4

50.1

If the Contractor shall fail to do any such work as aforesaid required by the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and if such work is work which, in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contract, then all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, or may be deducted by the Employer from any monies due or which may become due to the Contractor.

Contractor to Search

The Contractor shall, if required by the Engineer in writing, search under the directions of the Engineer for the cause of any defect, imperfection or fault appearing during the progress of the Works or in the Period of Maintenance. Unless such defect, imperfection or fault shall be one for which the Contractor is liable under the Contract, the cost of the work carried out by the Contractor in searching as aforesaid shall be borne by the If such defect, imperfection or fault shall be Employer. one for which the Contractor is liable as aforesaid, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case repair, rectify and make good such defect, imperfection or fault at his own expense in accordance with the provisions of Clause 49 hereof.

ALTERATIONS, ADDITIONS AND OMISSIONS

Variations

- 51.1 The Engineer shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:
 - (a) increase or decrease the quantity of any works included in the Contract,

or

(b) omit any such work,

or

(c) change the character or quality or kind of any such work,

or

(d) change the levels, lines, position and dimensions of any part of the Works,

or

(e) execute additional work of any kind necessary for the completion of the Works.

And no such variation shall in any way vitiate or invalidate the Contract, but the value, if any, of all such variations shall be taken into account in ascertaining the amount of the Contract price.

Orders for Variation be in Writing

51.2 No such variations shall be made by the Contractor without an order in writing of the Engineer. Provided that no order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities. Provided also that if for any reason the Engineer shall consider it desirable to give any such order verbally, the Contractor shall comply with such order and any confirmation in writing of such verbal order given by the Engineer, whether before or after the carrying out of the order, shall be deemed to be an order in writing within the meaning of this Clause. Provided further that if the Contractor shall within seven days confirm in writing to the Engineer and such confirmation shall not be contradicted in writing within fourteen days by the Engineer, it shall be deemed to be an order in writing by the Engineer.

Valuation of Variations

52.1 All extra or additional work done or work omitted by order of the Engineer shall be valued at the rates and prices set out in the Contract if, in the opinion of the Engineer, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the extra or additional work, then a suitable increase or decrease in Contract Price shall be agreed upon between the Employer's Delegate and the Contractor. In the event of disagreement the Engineer shall fix such increase or decrease in rates or prices as shall, in his opinion, be reasonable and proper.

Power of Engineer to Fix Rates

Provided that if the nature or amount of any omission or addition relative to the nature or amount of the whole of the Works or to any part thereof shall be such that, in the opinion of the Engineer, the rate or price contained in the Contract for any item of the Works is, by reason of such omission, or addition, rendered unreasonable or inapplicable, then a suitable rate or price shall be agreed upon between the Employer's Delegate and the Contractor. In the event of disagreement the Engineer shall fix such other rate or price as shall, in his opinion, be reasonable and proper having regard to the circumstances.

Provided also that no increase or decrease under Sub-Clause 52.1 or variation of rate or price under Sub-Clause 52.2 shall be made unless, as soon after the date of the order as is practicable or, in the case of extra or additional work, before the commencement of the work, or within fourteen days thereafter, notice shall be given in writing:-

(a) by the Contractor to the Engineer, with a copy to the Employer's Delegate, of his intention to claim extra payment or a varied rate or price,

or

(b) by the Engineer to the Contractor with a copy to the Employer's Delegate of his opinion that a rate or price, should be varied.

Rates to Apply

Provided further that no variation of rate or price under Sub-Clause 52.2 shall be made to any item of Work contained in the Bill of Quantities, unless such item accounts for an amount in excess of five percent of the net Contract Price (excluding Groups 1, 2 and 19 of the Bill of Quantities, and any Provisional Amounts allowed for Price Fluctuation and Contingencies) and the Quantity of work required to be executed or deleted as a result of any order of the Engineer's given under Clause 51 for any item, exceeds or falls short of the quantity set out in the Bill of Quantities by more than twenty-five percent.

Dayworks

The Engineer may, if, in his opinion it is necessary or desirable, order in writing that any additional or substituted work shall be executed on a daywork basis. The Contractor shall then be paid for such work under the conditions set out in the Dayworks Schedule included in the Contract and at the rates and prices affixed thereto by him in his Tender.

The Contractor shall furnish to the Engineer such receipts or other vouchers as may be necessary to prove the amounts paid and, before ordering materials, shall submit to the Engineer quotations for the same for his approval.

In respect of all work executed on a daywork basis, the Contractor shall, during the continuance of such work, deliver each day to the Engineer's Representative an exact list in duplicate of the names, occupation and times of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and plant used thereon or therefor (other than plant which is included in the percentage addition in accordance with the Schedule hereinbefore referred to). One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer's Representative and returned to the Contractor.

At the end of each month the Contractor shall deliver to the Engineer's Representative a priced statement of the labour, material and plant, except as aforesaid, used and the Contractor shall not be entitled to any payment unless such lists and statements have been fully and punctually rendered. Provided always that if the Engineer shall notify the Contractor in writing with a copy to the Employer's Delegate that for any reason the sending of such lists of statements by the Contractor, in accordance with the foregoing provision, was impracticable, he shall nevertheless be entitled to authorise payment for such work, either as daywork, on being satisfied as to the time

employed and plant and materials used on such work, or at such value therefor as shall, in his opinion, be fair and reasonable.

Claims

52.5

(a) If the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions other than Clause 12 or Sub-Clause 40.1 or Sub-Clauses 52.1 and 52.2 and he shall give notice in writing of his intention to the Engineer, within twenty-eight days of the date of the happening of the events giving rise to the claim. In the valuation of any claim the Contractor submits to the Engineer after having given notice under this Sub-Clause, the Engineer shall not be bound to consider any additional costs the Contractor may have incurred prior to the date of the happening of events giving rise to the claim or twenty-eight days prior to receipt by him of the Contractor's written notice of his intention to claim, whichever is the lesser.

Contemporary Records

(b) Upon the happening of such events giving rise to the claim the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make.

Inspection of Contemporary Records

(c) Without necessarily admitting the Employer's liability the Engineer shall upon receipt of a notice under Sub-Clause 52.5 (a) inspect such contemporary records and may instruct the Contractor's agent or representative to keep such further contemporary records as are reasonable and may be material to the claim for which notice has been given. The Contractor shall permit the Engineer to inspect all records kept pursuant to this Sub-Clause and shall supply him with copies thereof as and when the Engineer requires.

Substantiation and Accounts of Claims

(d) Within twenty-eight days, or such other time as may be agreed by the Engineer, after giving notice under Sub-Clause 52.5 (a) the Contractor shall send to the Engineer an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based together with a copy of all contemporary records relating to the claim.

Where the event giving rise to the claim has a continuing effect, such account shall be considered to be an interim account and the contractor shall, at monthly intervals send further interim accounts giving the accumulated amount of the claim, copies of the contemporary records kept during that month and details of any further grounds upon which the claim is based.

In all cases where interim accounts are sent to the Engineer, the Contractor shall send a final account within twenty-eight days of the end of the effects resulting from the events. The Contractor shall send copies of all accounts sent to the Engineer pursuant to this Sub-Clause to the Employer's Delegate.

Failure to Comply

(e) The Contractor's strict compliance with all of the requirements of these Conditions shall be conditions precedent to any entitlement in relation to any claim for additional costs the Contractor seeks to make under provision of any Clause of these Conditions. Provided always that the Engineer shall be entitled to give consideration to the validity of the grounds upon which any claim submitted by the Contractor is based, if the Contractor has at the earliest practicable opportunity notified the Engineer that he intends to make a claim. In such a case the Contractor's entitlement to payment in respect of such a claim shall be limited to such amount as the Engineer shall determine after investigating the Such investigation shall be based on the matter. Contractor's contemporary records, the Engineer's Representative's contemporary records if any, these Conditions of Contract and any other facts of which the Engineer has knowledge. Any determination given by the Engineer under this Sub-Paragraph shall be notified to the Contractor and the Employer's Delegate and shall be final and binding on the Employer, the Contractor and any person or Arbitrator appointed under the provision of Clause 67.

Payment on Claims

- (f) The Contractor shall be entitled to have included in interim payment certified by the Engineer pursuant to Sub-Clause 60.3 such amounts in respect of any claim, properly submitted by the Contractor, as the Engineer after due consultation with the Delegate and the Contractor's Employer's representative, may consider due to the Contractor, provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine the validity of the claim and the amount due. If such particulars are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment in respect of such part of the claim as such particulars may substantiate to the satisfaction The Engineer shall notify the of the Engineer. Contractor of any determination made under this Sub-Paragraph, with a copy to the Employer's Delegate.
- (g) Should the Contractor refuse or fail to keep contemporary records as required by the provisions of this Sub-Clause or refuse to keep such records to the satisfaction of the Engineer or if the Contractor fails to copy those records to the Engineer or refuses to allow the Engineer to inspect, or in any way prevents him from inspecting contemporary records relating to a particular claim of which the Contractor has given notice, the Engineer shall be entitled to refuse to consider the Contractor's claim submitted pursuant to paragraph (d) of this Sub-Clause.

CONTRACTOR'S PLANT, EQUIPMENT, TEMPORARY WORKS AND MATERIALS

Contractor's Plant, Equipment Temporary Works and Materials; Exclusive Use for the Works

All Contractor's Plant, Equipment, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Site to another, without the consent of the Engineer. Provided that consent shall not be required for vehicles engaged in transporting any staff, labour, Contractor's Equipment, Temporary Works, Plant or materials to or from the Site.

Employer not Liable for Damage

53.2 The Employer shall not at any time be liable, save as mentioned in Clauses 20 and 65, for the loss of or damage to any of the said Contractor's Equipment, Temporary Works or materials.

Customs Clearance

53.3 The Employer will use his best endeavours in assisting the Contractor, where required, in obtaining clearance through the Customs of Contractor's Equipment, materials and other things required for the Works.

Re-export of Contractor's Equipment

In respect of any Contractor's Equipment which the Contractor has imported for the purposes of the works, the Employer will use his best endeavours to assist the Contractor, where required, in procuring any necessary Government consent to the re-export of such Contractor's Equipment by the Contractor upon the removal thereof pursuant to the terms of the Contract.

Conditions of 53.5 Hire of Contractor's Equipment

With a view to securing, in the event of termination under Clause 63, the continued availability, for the purpose executing the Works, of any hired Contractor's Equipment, the Contractor shall not bring on to the site any hired Contractor's Equipment unless there is an agreement for the hire thereof (which agreement shall be deemed not to include an agreement for hire purchase) which contains a provision that the owner thereof will, on request in writing made by the Employer within 7 days after the date on which any termination has become effective, and on the Employer undertaking to pay all hire charges in respect thereof from such date, hire such Contractor's Equipment to the Employer on'the same terms in all respects as the same was hired to the Contractor save that the Employer shall be entitled to permit the use thereof by any other contractor employed by him for the purpose of executing and completing the Works and remedying any defects therein, under the terms of the said Clause 63.

Costs for the Purpose of Clause 63

53.6 In the event of the Employer entering into any agreement for the hire of Contractor's Equipment pursuant to Sub-Clause 54.5, 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 purpose of Clause 63, to be part of the cost of executing and completing the Works and remedying any defects therein.

Incorporation of Clause in Sub-Contracts

53.7 The Contractor shall, where entering into any Sub-Contract for the execution of any part of the Works, incorporate in such Sub-Contract (by reference or otherwise) the provisions of this Clause in relation to Contractor's Equipment, Temporary Works or materials brought on to the Site by the Sub-Contractor.

Approval of Materials not Implied

54.1 The operation of this Clause shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

MEASUREMENT

Quantities

55.1 The quantities set out in the Bill of Quantities are the estimated quantities of the work, but they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfillment of his obligations under the Contract.

Works to be Measured

56.1 The Engineer shall, except as otherwise stated, ascertain and determine by measurement the value of the Works in accordance with the Contract and the Contractor shall be paid that value in accordance with Clause 60. The Engineer shall, when he requires any part of the Works to be measured, give notice to the Contractor's authorised agent, who shall:

(a) forthwith attend or send a qualified representative to assist the Engineer in making such measurement,

and

(b) supply all particulars required by the Engineer.

Agent's Failure to Attend

Should the Contractor's agent not attend, or neglect or 56.2 omit to send such representative, or not supply such particulars, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of that part of the Works. For the purpose of measuring such Permanent Works as are to be measured by records and drawings, the Engineer shall prepare records and drawings as the work proceeds and the Contractor, as and when called upon to do so in writing, shall, within 14 days, attend to examine and agree such records and drawings with the Engineer and shall sign the same when so If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be If, after examination of such records and correct. drawings, the Contractor does not agree the same or does not sign the same as agreed, they shall nevertheless be taken to be correct, unless the Contractor, within 14 days of such examination, lodges with the Engineer notice of the respects in which such records and drawings are