

### FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS

## **CONDITIONS OF CONTRACT**

### FOR WORKS OF CIVIL

### **ENGINEERING CONSTRUCTION**

**PART I** GENERAL CONDITIONS
WITH FORMS OF TENDER AND AGREEMENT

**PART II** CONDITIONS OF PARTICULAR APPLICATION WITH GUIDELINES FOR PREPARATION OF PART II CLAUSES

**FOURTH EDITION 1987** 

Reprinted 1988 with editorial amendments

Reprinted 1992 with further amendments



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### **FOREWORD**

The terms of the Fourth Edition of the Conditions of Contract for Works of Civil Engineering Construction have been prepared by the Fédération Internationale des Ingénieurs Conseils (FIDIC) and are recommended for general use for the purpose of construction of such works where tenders are invited on an international basis. The Conditions, subject to minor modifications, are also suitable for use on domestic contracts.

The version in English of the Conditions is considered by FIDIC as the official and authentic text for the purpose of translation.

In the preparation of the Conditions it was recognised that while there are numerous Clauses which will be generally applicable there are some Clauses which must necessarily vary to take account of the circumstances and locality of the Works. The Clauses of general application have been grouped together in this document and are referred to as Part I – General Conditions. They have been printed in a form which will facilitate their inclusion as printed in the contract documents normally prepared.

The General Conditions are linked with the Conditions of Particular Application, referred to as Part II, by the corresponding numbering of the Clauses, so that Parts I and II together comprise the Conditions governing the rights and obligations of the parties.

Part II must be specially drafted to suit each individual Contract.

When dredging and certain types of reclamation work are involved special consideration must be given to Part II.

To assist in the preparation of Part II explanatory material and example clauses are published with the Conditions in a separately bound document entitled "Conditions of Contract for Works of Civil Engineering Construction, Part II – Conditions of Particular Application, with Guidelines for preparation of Part II Clauses, Fourth Edition".

FIDIC has published a "Guide to the Use of FIDIC Conditions of Contract for Works of Civil Engineering Construction" which includes comments on the provisions of the Fourth Edition of the Conditions. Users of the Fourth Edition may find it helpful to refer to this Guide.

It may also be helpful for users to refer to other FIDIC publications, such as:

Tendering Procedure (First Edition 1982) Construction, Insurance and Law (1986)

FIDIC gratefully acknowledges the suggestions and comments it has received during the preparation of this edition from European International Contractors (EIC) as mandatory of Confederation of International Contractors Associations (CICA) with participation of Associated General Contractors of America (AGC).

### **CONTENTS**

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### **PART I: GENERAL CONDITIONS**

	Definitions and Interpretation	
1.1	Definitions	1
1.2	Headings and Marginal Notes	2
1.3	Interpretation	2
1.4	Singular and Plural	2
1.5	Notices, Consents, Approvals, Certificates	3
	and Determinations	
	Engineer and Engineer's Depresentative	
0.4	Engineer and Engineer's Representative	_
2.1 2.2	Engineer's Duties and Authority Engineer's Representative	3
2.3	Engineer's Authority to Delegate	3
2.4	Appointment of Assistants	3 3
2.5	Instructions in Writing	3
2.6	Engineer to Act Impartially	4
0.4	Assignment and Subcontracting	
3.1 4.1	Assignment of Contract Subcontracting	4
4.1	Assignment of Subcontractors' Obligations	4
7.2	Assignment of Subcontractors Conganons	4
	Contract Documents	
5.1	Language/s and Law	4
5.2	Priority of Contract Documents	5
6.1	Custody and Supply of Drawings and Documents	5
6.2	One Copy of Drawings to be Kept on Site	5
6.3 6.4	Disruption of Progress	5
6.4 6.5	Delays and Cost of Delay of Drawings	5
7.1	Failure by Contractor to Submit Drawings Supplementary Drawings and Instructions	5
7.1 7.2	Permanent Works Designed by Contractor	6
7.3	Responsibility Unaffected by Approval	6
	• • •	
	General Obligations	
8.1	Contractor's General Responsibilities	6
8.2	Site Operations and Methods of Construction	6
9.1 10.1	Contract Agreement	6
10. 1 10.2	Performance Security	6
10.2	Period of Validity of Performance Security	7
11.1	Claims under Performance Security Inspection of Site	7
12.1	Sufficiency of Tender	7
12.2	Not Foreseeable Physical Obstructions or Conditions	7
13.1	Work to be in Accordance with Contract	7 8
14.1	Programme to be Submitted	8
14.2	Revised Programme	8
14.3	Cash Flow Estimate to be Submitted	8
14.4	Contractor not Relieved of Duties or Responsibilities	8
15.1	Contractor's Superintendence	8

I

16.1	Contractor's Employees	8
16.2	Engineer at Liberty to Object	8
17.1	Setting-out	9
18.1	Boreholes and Exploratory Excavation	9
19.1	Safety, Security and Protection of the Environment	9
19.2	Employer's Responsibilities	9
20.1	Care of Works	9
20.2	Responsibility to Rectify Loss or Damage	10
20.3	Loss or Damage Due to Employer's Risks	10
20.4	Employer's Risks	10
21.1	Insurance of Works and Contractor's Equipment	10
21.2	Scope of Cover	11
21.3	Responsibility for Amounts not Recovered	11
21.4	Exclusions	11
22.1	Damage to Persons and Property	11
22.2	Exceptions	11
22.3	Indemnity by Employer	12
23.1	Third Party Insurance (including Employer's Property)	12
23.2	Minimum Amount of Insurance	12
23.3	Cross Liabilities	12
24.1	Accident or Injury to Workmen	12
24.2	Insurance Against Accident to Workmen	12
25.1	Evidence and Terms of Insurances	12
25.2	Adequacy of Insurances	12
25.3	Remedy on Contractor's Failure to Insure	12
25.4	Compliance with Policy Conditions	12
26.1	Compliance with Statutes, Regulations	13
27.1	Fossils	13
28.1	Patent Rights	13
28.2	Royalties	13
29.1	Interference with Traffic and Adjoining Properties	13
30.1	Avoidance of Damage to Roads	14
30.2 30.3	Transport of Contractor's Equipment or Temporary Works Transport of Materials or Plant	14
30.4	Waterborne Traffic	14
31.1		14
31.2	Opportunities for Other Contractors Facilities for Other Contractors	14 14
32.1	Contractor to Keep Site Clear	15
33.1	Clearance of Site on Completion	15
0011		13
04.4	Labour	1.5
34.1 35.1	Engagement of Staff and Labour Returns of Labour and Contractor's Equipment	15 15
33.1	Returns of Labour and Contractor's Equipment	13
	Materials, Plant and Workmanship	
36.1	Quality of Materials, Plant and Workmanship	15
36.2	Cost of Samples	15
36.3	Cost of Tests	15
36.4	Cost of Tests not Provided for	16
36.5	Engineer's Determination where Tests not Provided for	16
37.1	Inspection of Operations	16
37.2	Inspection and Testing	16
37.3	Dates for Inspection and Testing	16
37.4	Rejection	16
37.5	Independent Inspection	17
38.1	Examination of Work before Covering up	17

II

38.2 39.1 39.2	Uncovering and Making Openings Removal of Improper Work, Materials or Plant Default of Contractor in Compliance	17 17
33.Z	Default of Contractor in Compitance	17
	Suspension	
40.1	Suspension of Work	17
40.2	Engineer's Determination following Suspension	18
40.3	Suspension lasting more than 84 Days	18
	Commencement and Delays	
41.1	Commencement of Works	18
42.1	Possession of Site and Access Thereto	18
42.2	Failure to Give Possession	19
42.3	Rights of Way and Facilities	19
43.1 44.1	Time for Completion	19
44.2	Extension of Time for Completion Contractor to Provide Notification and Detailed Particulars	19
44.3	Interim Determination of Extension	19
45.1	Restriction on Working Hours	19
46.1	Rate of Progress	20 20
47.1	Liquidated Damages for Delay	20
47.2	Reduction of Liquidated Damages	20
48.1	Taking-Over Certificate	21
48.2	Taking-Over of Sections or Parts	21
48.3	Substantial Completion of Parts	21
48.4	Surfaces Requiring Reinstatement	21
	Defects Liability	
49.1	Defects Liability Period	21
49.2	Completion of Outstanding Work and Remedying Defects	22
49.3	Cost of Remedying Defects	22
49.4	Contractor's Failure to Carry Out Instructions	22
50.1	Contractor to Search	22
	Alterations, Additions and Omissions	
51.1	Variations	22
51.2	Instructions for Variations	23
52.1	Valuation of Variations	23
52.2	Power of Engineer to Fix Rates	23
52.3	Variations Exceeding 15 percent	23
52.4	Daywork	24
	Procedure for Claims	
53.1	Notice of Claims	24
53.2	Contemporary Records	24
53.3	Substantiation of Claims	25
53.4	Failure to Comply	25
53.5	Payment of Claims	25
	Contractorio Equipment Tours and Maria	
	Contractor's Equipment, Temporary Works and Materials	
E 4 4		_
54.1	Contractor's Equipment, Temporary Works and Materials; Exclusive	25
54.2	Use for the Works Employer not Liable for Damage	25
54.2 54.3	Employer not Liable for Damage Customs Clearance	25
JT.J	Customs Citaranic	25

54.4	Re-export of Contractor's Equipment	25
54.5	Conditions of Hire of Contractor's Equipment	26
54.6	Costs for the Purpose of Clause 63	26
54.7	Incorporation of Clause in Subcontracts	26
54.8	Approval of Materials not Implied	26
	Measurement	
55.1	Quantities	26
56.1	Works to be Measured	26
57.1	Method of Measurement	27
57.2	Breakdown of Lump Sum Items	27
	Provisional Sums	
58.1	Definition of "Provisional Sum"	27
58.2	Use of Provisional Sums	27
58.3	Production of Vouchers	27
	Nominated Subcontractors	
59.1	Definition of "Nominated Subcontractors"	27
59.2	Nominated Subcontractors; Objection to Nomination	27
59.3	Design Requirements to be Expressly Stated	28
59.4	Payments to Nominated Subcontractors	28
59.5	Certification of Payments to Nominated Subcontractors	28
	Certificates and Payment	
60.1	Monthly Statements	29
60.2	Monthly Payments	29
60.3	Payment of Retention Money	29
60.4	Correction of Certificates	29
60.5	Statement at Completion	30
60.6	Final Statement	30
60.7	Discharge	30
60.8	Final Payment Certificate	30
60.9	Cessation of Employer's Liability	30
60.10	Time for Payment	31
61.1	Approval only by Defects Liability Certificate	31
62.1	Defects Liability Certificate	31
62.2	Unfulfilled Obligations	31
	Remedies	
63.1	Default of Contractor	31
63.2	Valuation at Date of Termination	32
63 3	Payment after Termination	32
63.4	Assignment of Benefit of Agreement	32
64.1	Urgent Remedial Work	32
	Special Risks	
65.1	No Liability for Special Risks	33
65.2	Special Risks	33
65.3	Damage to Works by Special Risks	33
65.4	Projectile, Missile	33
65.5	Increased Costs arising from Special Risks	33
65.6	Outbreak of War	33
65.7	Removal of Contractor's Equipment on Termination	34
65.8	Payment if Contract Terminated	34
	<del>-</del>	5.

IV

	Release from Performance	
66.1	Payment in Event of Release from Performance	35
	Settlement of Disputes	
67.1	Engineer's Decision	35
67.2	Amicable Settlement	35
67.3	Arbitration	36
67.4	Failure to Comply with Engineer's Decision	36
	Notices	
68.1	Notice to Contractor	36
68.2	Notice to Employer and Engineer	36
68.3	Change of Address	36
	Default of Employer	
69.1	Default of Employer	36
69.2	Removal of Contractor's Equipment	37
69.3	Payment on Termination	37
69.4	Contractor's Entitlement to Suspend Work	37
69.5	Resumption of Work	37
	Changes in Cost and Legislation	
70.1	Increase or Decrease of Cost	37
70.2	Subsequent Legislation	37
	Currency and Rates of Exchange	
71.1	Currency Restrictions	38
72.1	Rates of Exchange	38
72.2	Currency Proportions	38
72.3	Currencies of Payment for Provisional Sums	38
	•	

REFERENCE TO PART II
INDEX
TENDER
AGREEMENT
EDITORIAL AMENDMENTS IN 1988
FURTHER AMENDMENTS IN 1992

### 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 person named as such in Part II of these Conditions and the legal successors in title to such person, but not (except with the consent of the Contractor) any assignee of such person.
    - (ii) "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.
    - (iii) "Subcontractor" means any person named in the Contract as a Subcontractor for a part of the Works or any person to whom a part of the Works has been subcontracted with the consent of the Engineer and the legal successors in title to such person, but not any assignee of any such person.
    - (iv) "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.
    - (v) "Engineer's Representative" means a person appointed from time to time by the Engineer under Sub-Clause 2.2.
  - (b) (i) "Contract" means these Conditions (Parts I and II), the Specification, the Drawings, the Bill of Quantities, the Tender, the Letter of Acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement (if completed).
    - (ii) "Specification" means the specification of the Works included in the Contract and any modification thereof or addition thereto made under Clause 51 or submitted by the Contractor and approved by the Engineer.
    - (iii) "Drawings" means all drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation and maintenance manuals and other technical information of a like nature submitted by the Contractor and approved by the Engineer.
    - (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) "Taking-Over Certificate" 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 provisions of the Contract.
  - (ii) "Retention Money" means the aggregate of all monies retained by the Employer pursuant to Sub-Clause 60.2(a).
  - (iii) "Interim Payment Certificate" means any certificate of payment issued by the Engineer other than the Final Payment Certificate.
  - (iv) "Final Payment Certificate" means the certificate of payment issued by the Engineer pursuant to Sub-Clause 60.8.
- (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 (including Plant) in accordance with the Contract.
  - (iii) "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required in or about the execution and completion of the Works and the remedying of any defects therein.
  - (iv) "Plant" means machinery, apparatus and the like intended to form or forming part of the Permanent Works.
  - (v) "Contractor's Equipment" 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.
  - (vi) "Section" means a part of the Works specifically identified in the Contract as a Section.
  - (vii) "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 in which the Works are to be located.
  - (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 and Plural

**1.4** Words importing the singular only also include the plural and vice versa where the context requires.

### Notices, Consents, Approvals, Certificates and Determinations

1.5 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. Any such consent, approval, certificate or determination shall not unreasonably be withheld or delayed.

### **Engineer and Engineer's Representative**

## Engineer's Duties and Authority

- **2. 1** (a) The Engineer shall carry out the duties specified in the Contract.
  - (b) The Engineer may exercise the authority specified in or necessarily to be implied from the Contract, provided, however, that if the Engineer is required, under the terms of his appointment by the Employer, to obtain the specific approval of the Employer before exercising any such authority, particulars of such requirements shall be set out in Part II of these Conditions. Provided further that any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Engineer.
  - (c) Except as expressly stated in the Contract, 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 appointed by and be responsible to the Engineer and shall carry out such duties and exercise such authority as may be delegated to him by the Engineer under Sub-Clause 2.3.

### Engineer's Authority to Delegate

2.3 The Engineer may from time to time delegate to the Engineer's Representative any of the duties and authorities vested in the Engineer and he may at any time revoke such delegation. Any such delegation or revocation shall be in writing and shall not take effect until a copy thereof has been delivered to the Employer and the Contractor.

Any communication given by the Engineer's Representative to the Contractor in accordance with such delegation shall have the same effect as though it had been given by the Engineer. Provided that:

- (a) any failure of the Engineer's Representative to disapprove any work, materials or Plant shall not prejudice the authority of the Engineer to disapprove such work, materials or Plant and to give instructions for the rectification thereof; and
- (b) if the Contractor questions any communication of the Engineer's Representative he may refer the matter to the Engineer who shall confirm, reverse or vary the contents of such communication.

### Appointment of Assistants

2.4 The Engineer or the Engineer's Representative may appoint any number of persons to assist the Engineer's Representative in the carrying out of his duties under Sub-Clause 2.2. He shall notify to the Contractor the names, duties and scope of authority of such persons. Such assistants shall have no authority to issue any instructions to the Contractor save in so far as such instructions may be necessary to enable them to carry out their duties and to secure their acceptance of materials, Plant or workmanship as being in accordance with the Contract, and any instructions given by any of them for those purposes shall be deemed to have been given by the Engineer's Representative.

## Instructions in Writing

2.5 Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any such instruction orally, the Contractor shall comply with such instruction. Confirmation in writing of such oral instruction given by the Engineer, whether before or after the carrying out of the instruction, shall be deemed to be an instruction within the meaning of this Sub-Clause. Provided further that if the Contractor, within 7 days, confirms in writing to the Engineer any oral instruction of the Engineer and such confirmation is not contradicted in writing within 7 days by the Engineer, it shall be deemed to be an instruction of the Engineer.

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3

The provisions of this Sub-Clause shall equally apply to instructions given by the Engineer's Representative and any assistants of the Engineer or the Engineer's Representative appointed pursuant to Sub-Clause 2.4.

### Engineer to Act Impartially

- **2.6** Wherever, under the Contract, the Engineer is required to exercise his discretion by:
  - (a) giving his decision, opinion or consent,
  - (b) expressing his satisfaction or approval,
  - (c) determining value, or
  - (d) otherwise taking action which may affect the rights and obligations 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. Any such decision, opinion, consent, expression of satisfaction, or approval, determination of value or action may be opened up, reviewed or revised as provided in Clause 67.

### **Assignment and Subcontracting**

### Assignment of Contract

- **3.1** The Contractor shall not, without the prior consent of the Employer (which consent, notwithstanding the provisions of Sub-Clause 1.5, shall be at the sole discretion of the Employer), assign the Contract or any part thereof, or any benefit or interest therein or thereunder, otherwise than by:
  - (a) a charge in favour of the Contractor's bankers of any monies due or to become due under the Contract, or
  - (b) assignment to the Contractor's insurers (in cases where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

### **Subcontracting**

4.1 The Contractor shall not subcontract the whole of the Works. Except where otherwise provided by the Contract, the Contractor shall not subcontract any part of the Works without the prior consent of the Engineer. Any such consent 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 Subcontractor, 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 that the Contractor shall not be required to obtain such consent for:

- (a) the provision of labour,
- (b) the purchase of materials which are in accordance with the standards specified in the Contract, or
- (c) the subcontracting of any part of the Works for which the Subcontractor is named in the Contract.

### Assignment of Subcontractors' Obligations

**4.2** In the event of a Subcontractor having undertaken towards the Contractor in respect of the work executed, or the goods, materials, Plant or services supplied by such Subcontractor, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time, after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

### **Contract Documents**

## Language/s and Law

- **5. 1** There is stated in Part II of these Conditions:
  - (a) the language or languages in which the Contract documents shall be drawn up, and
  - (b) the country or state the law of which shall apply to the Contract and according to which the Contract shall be construed.

If the said documents are written in more than one language, the language according to which the Contract shall be construed and interpreted is also stated in Part II of these Conditions, being therein designated the "Ruling Language".

### Priority of Contract Documents

- 5.2 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 and in such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:
  - (1) The Contract Agreement (if completed);
  - (2) The Letter of Acceptance;
  - (3) The Tender;
  - (4) Part II of these Conditions;
  - (5) Part I of these Conditions; and
  - (6) Any other document forming part of the Contract.

### Custody and Supply of Drawings and Documents

6.1 The Drawings shall remain in the sole custody of the Engineer, but two copies thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him. Unless it is strictly necessary for the purposes of the Contract, the Drawings, Specification and other documents provided by the Employer or the Engineer shall not, without the consent of the Engineer, be used or communicated to a third party by the Contractor. Upon issue of the Defects Liability Certificate, the Contractor shall return to the Engineer all Drawings, Specification and other documents provided under the Contract.

The Contractor shall supply to the Engineer four copies of all Drawings, Specification and other documents submitted by the Contractor and approved by the Engineer in accordance with Clause 7, together with a reproducible copy of any material which cannot be reproduced to an equal standard by photocopying. In addition the Contractor shall supply such further copies of such Drawings, Specification and other documents as the Engineer may request in writing for the use of the Employer, who shall pay the cost thereof.

### One Copy of Drawings to be Kept on Site

**6.2** One copy of the Drawings, provided to or supplied by 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 by any other person authorised by the Engineer in writing.

### Disruption of Progress

6.3 The Contractor shall give notice to the Engineer, with a copy to the Employer, whenever planning or execution of the Works is likely to be delayed or disrupted unless any further drawing or instruction is issued by the Engineer within a reasonable time. The notice shall include details of the drawing or instruction 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 and Cost of Delay of Drawings

- 6.4 If, by reason of any failure or inability of the Engineer to issue, within a time reasonable in all the circumstances, any drawing or instruction for which notice has been given by the Contractor in accordance with Sub-Clause 63, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:
  - (a) any extension of time to which the Contractor is entitled under Clause 44, and
  - (b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.

### Failure by Contractor to Submit Drawings

6.5 If the failure or inability of the Engineer to issue any drawings or instructions is caused in whole or in part by the failure of the Contractor to submit Drawings, Specification or other documents which he is required to submit under the Contract, the Engineer shall take such failure by the Contractor into account when making his determination pursuant to Sub-Clause 6.4.

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### Supplementary Drawings and Instructions

7.1 The Engineer shall have authority to issue to the Contractor, from time to time, such supplementary Drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

## Permanent Works Designed by Contractor

- **7.2** Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall submit to the Engineer, for approval:
  - (a) such drawings, specifications, calculations and other information as shall be necessary to satisfy the Engineer as to the suitability and adequacy of that design, and
  - (b) operation and maintenance manuals together with drawings of the Permanent Works as completed, in sufficient detail to enable the Employer to operate, maintain, dismantle, reassemble and adjust the Permanent Works incorporating that design. The Works shall not be considered to be completed for the purposes of taking over in accordance with Clause 48 until such operation and maintenance manuals, together with drawings on completion, have been submitted to and approved by the Engineer.

### Responsibility Unaffected by Approval

7.3 Approval by the Engineer, in accordance with Sub-Clause 7.2, shall not relieve the Contractor of any of his responsibilities under the Contract.

### **General Obligations**

### Contractor's General Responsibilities

8.1 The Contractor shall, with due care and diligence, design (to the extent provided for by the Contract), execute and complete the Works and remedy any defects therein in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, Plant, Contractor's Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

The Contractor shall give prompt notice to the Engineer, with a copy to the Employer, of any error, omission, fault or other defect in the design of or Specification for the Works which he discovers when reviewing the Contract or executing the Works.

## Site Operations and Methods of Construction

8.2 The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations and methods of construction. Provided that the Contractor shall not be responsible (except as stated hereunder or as may be otherwise agreed) for the design or specification of Permanent Works, or for the design or specification of any Temporary Works not prepared by the Contractor. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such Works, notwithstanding any approval by the Engineer.

### Contract Agreement

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

## Performance Security

10.1 If the Contract requires the Contractor to obtain security for his proper performance of the Contract, he shall obtain and provide to the Employer such security within 28 days after the receipt of the Letter of Acceptance, in the sum stated in the Appendix to Tender. When providing such security to the Employer, the Contractor shall notify the Engineer of so doing. Such security shall be in the form annexed to these Conditions or in such other form as may be agreed between the Employer and the Contractor. The institution providing such security shall be subject to the approval of the Employer. The cost of complying with the requirements of this Clause shall be borne by the Contractor, unless the Contract otherwise provides.

### Period of Validity of Performance Security

10.2 The performance security shall be valid until the Contractor has executed and completed the Works and remedied any defects therein in accordance with the Contract. No claim shall be made against such security after the issue of the Defects Liability Certificate in accordance with Sub-Clause 62.1 and such security shall be returned to the Contractor within 14 days of the issue of the said Defects Liability Certificate,

### Claims under Performance Security

Prior to making a claim under the performance security the Employer shall, in every case, notify the Contractor stating the nature of the default in respect of which the claim is to be made.

### Inspection of Site

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

The Contractor shall 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, having regard to considerations of cost and time) before submitting his Tender, as to:

- (a) the form and nature thereof, including the sub-surface conditions,
- (b) the hydrological and climatic conditions,
- (c) the extent and nature of work and materials necessary for the execution and completion of the Works and the remedying of any defects therein, and
- (d) 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.

The Contractor shall be deemed to have based his Tender on the data made available by the Employer and on his own inspection and examination, all as aforementioned.

### Sufficiency of Tender

12.2

12.1 The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Tender and of the rates and prices stated in the Bill of Quantities, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services or of contingencies for which there is a Provisional Sum) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein.

### Not Foreseeable Physical Obstructions or Conditions

If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer, with a copy to the Employer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer.

### Work to be in Accordance with Contract

Unless it is legally or physically impossible, the Contractor shall execute and complete the Works and remedy any defects therein 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 on any matter, whether mentioned in the Contract or not, touching or concerning the Works. The Contractor shall take instructions only from the Engineer (or his delegate).

#### Programme to be Submitted

14.1

14.2

15. 1

16.2

The Contractor shall, within the time stated in Part II of these Conditions after the date of the Letter 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

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 Estimate to be Submitted

14.3 The Contractor shall, within the time stated in Part II of these Conditions 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 Relieved of Duties or Responsibilities

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

## Contractor's Superintendence

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. The Contractor, or a competent and authorised representative approved of by the Engineer, which approval may at any time be withdrawn, shall give his whole time to the superintendence of the Works. Such authorised representative shall receive, on behalf of the Contractor, instructions from the Engineer.

If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as is practicable, having regard to the requirement of replacing him as hereinafter mentioned, after receiving notice of such withdrawal, remove the representative from the Works and shall not thereafter employ him again on the Works in any capacity and shall replace him by another representative approved by the Engineer.

### Contractor's Employees

**16. 1** The Contractor shall provide on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:

- (a) only such technical assistants as are skilled and experienced in their respective callings and such foremen and leading hands as are competent to give proper superintendence of the Works, and
- (b) such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely fulfilling of the Contractor's obligations under the Contract.

### Engineer at Liberty to Object

The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any person so removed from the Works shall be replaced as soon as possible.

#### **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.

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 bench-marks, sight-rails, pegs and other things used in setting-out the Works.

### Boreholes and Exploratory Excavation

18.1 If, at any time during the execution of the Works, the Engineer requires the Contractor to make boreholes or to carry out 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

**19.1** 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 (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,
- (b) provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and
- (c) 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 an 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.

#### Care of Works 20.1

The Contractor shall take full responsibility for the care of the Works and materials and Plant for incorporation therein from the Commencement Date until the date of issue of the Taking-Over Certificate for the whole of the Works, when the responsibility for the said care shall pass to the Employer. Provided that:

(a) if the Engineer issues a Taking-Over Certificate for any Section or part of the Permanent Works the Contractor shall cease to be liable for the care of that Section or part from the date of issue of the Taking-Over Certificate, when the responsibility for the care of that Section or part shall pass to the Employer, and

(b) the Contractor shall take full responsibility for the care of any outstanding Works and materials and Plant for incorporation therein which he undertakes to finish during the Defects Liability Period until such outstanding Works have been completed pursuant to Clause 49.

## Responsibility to Rectify Loss or Damage

20.2

20.3

If any loss or damage happens to the Works, or any part thereof, or materials or Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, other than the risks defined in Sub-Clause 20.4, the Contractor shall, at his own cost, rectify such loss or damage so that the Permanent Works conform in every respect with the provisions of the Contract to the satisfaction of the Engineer. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Clauses 49 and 50.

### Loss or Damage Due to Employer's Risks

In the event of any such loss or damage happening from any of the risks defined in Sub-Clause 20.4, or in combination with other risks, the Contractor shall, if and to the extent required by the Engineer, rectify the loss or damage and 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. In the case of a combination of risks causing loss or damage any such determination shall take into account the proportional responsibility of the Contractor and the Employer.

### **Employer's Risks**

**20.4** The Employer's 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, or civil war,
- (c) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof,
- (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (e) riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the Works,
- (f) loss or damage due to the use or occupation by the Employer of any Section or part of the Permanent Works, except as may be provided for in the Contract,
- (g) loss or damage to the extent that it is due to the design of the Works, other than any part of the design provided by the Contractor or for which the Contractor is responsible, and
- (h) any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

### Insurance of Works and Contractor's Equipment

- **21.1** The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 20, insure:
  - (a) the Works, together with materials and Plant for incorporation therein, to the full replacement cost (the term "cost" in this context shall include profit),
  - (b) an additional sum of 15 per cent of such replacement cost, or as may be specified in Part II of these Conditions, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature, and
  - (c) the Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

#### **Scope of Cover**

- **21.2** The insurance in paragraphs (a) and (b) of Sub-Clause 21.1 shall be in the joint names of the Contractor and the Employer and shall cover:
  - (a) the Employer and the Contractor against all loss or damage from whatsoever cause arising, other than as provided in Sub-Clause 21.4, from the start of work at the Site until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
  - (b) the Contractor for his liability:
    - (i) during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, and
    - (ii) for 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.

### Responsibility for Amounts not Recovered

## 21.3 Any amounts not insured or not recovered from the insurers shall be borne by the Employer or the Contractor in accordance with their responsibilities under Clause 20.

#### **Exclusions**

- **21.4** There shall be no obligation for the insurances in Sub-Clause 21.1 to include loss or damage caused by:
  - (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
  - (b) rebellion, revolution, insurrection, or military or usurped power, or civil war,
  - (c) ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof, or
  - (d) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds.

### Damage to Persons and Property

22.1

- The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of:
- (a) death of or injury to any person, or
- (b) loss of or damage to any property (other than the Works),

which may arise out of or in consequence of the execution and completion of the Works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, subject to the exceptions defined in Sub-Clause 22.2.

#### **Exceptions**

- **22.2** The "exceptions" referred to in Sub-Clause 22.1 are:
  - (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) damage to property which is the unavoidable result of the execution and completion of the Works, or the remedying of any defects therein, in accordance with the Contract, and
  - (d) death of or injury to persons or loss of or damage to property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor, 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 said injury or damage 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 injury or damage.

### Indemnity by Employer

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

### Third Party Insurance (including Employer's Property)

23.1 The Contractor shall, without limiting his or the Employer's obligations and responsibilities under Clause 22, insure, in the joint names of the Contractor and the Employer, against liabilities for death of or injury to any person (other than as provided in Clause 24) or loss of or damage to any property (other than the Works) arising out of the performance of the Contract, other than the exceptions defined in paragraphs (a), (b) and (c) of Sub-Clause 22.2.

## Minimum Amount of Insurance

**23.2** Such insurance shall be for at least the amount stated in the Appendix to Tender.

### **Cross Liabilities**

23.3 The insurance policy shall include a cross liability clause such that the insurance shall apply to the Contractor and to the Employer as separate insureds.

## Accident or Injury to Workmen

24.1 The Employer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

### Insurance Against Accident to Workmen

24.2 The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by him on the Works. Provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this Sub-Clause shall be satisfied if the Subcontractor 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 Employer, when required, such policy of insurance and the receipt for the payment of the current premium.

### Evidence and Terms of Insurances

25.1 The Contractor shall provide evidence to the Employer prior to the start of work at the Site that the insurances required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the Employer. When providing such evidence and such policies to the Employer, the Contractor shall notify the Engineer of so doing. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurances for which he is responsible with insurers and in terms approved by the Employer.

### Adequacy of Insurances

25.2 The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Employer the insurance policies in force and the receipts for payment of the current premiums.

### Remedy on Contractor's Failure to Insure

25.3

25.4

If the Contractor fails to effect and keep in force any of the insurances required under the Contract, or fails to provide the policies to the Employer within the period required by Sub-Clause 25.1, then and in any such case the Employer may effect and keep in force any such insurances and pay any premium as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or to become due to the Contractor, or recover the same as a debt due from the Contractor.

## Compliance with Policy Conditions

In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.

## Compliance with Statutes, Regulations

- **26.1** The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provisions of:
  - (a) 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 and completion of the Works and the remedying of any defects therein, and
  - (b) 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,

and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provisions. Provided always that the Employer shall be responsible for obtaining any planning, zoning or other similar permission required for the Works to proceed and shall indemnify the Contractor in accordance with Sub-Clause 22.3.

#### Fossils 27.1

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site 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 Engineer of such discovery and carry out the Engineer's instructions for dealing with the same. If, by reason of such instructions, the Contractor suffers delay and/or incurs costs then the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.

#### **Patent Rights**

28.1

29.1

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 Equipment, materials or Plant used for or in connection with or for incorporation in the Works and from and against all damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.

### **Royalties**

**28.2** Except where otherwise stated, 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.

### Interference with Traffic and Adjoining Properties

All operations necessary for the execution and completion of the Works and the remedying of any defects therein shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with:

- (a) the convenience of the public, or
- (b) 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 insofar as the Contractor is responsible therefor.

## Avoidance of Damage to Roads

The Contractor shall use every reasonable means to prevent any of the roads 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 materials, Plant, Contractor's Equipment or Temporary Works 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 roads and bridges.

### Transport of Contractor's Equipment or Temporary Works

Save insofar as the Contract otherwise provides, the Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the Site to facilitate the movement of Contractor's Equipment or Temporary Works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any such road or bridge caused by such movement, including such claims as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

### Transport of Materials or Plant

30.3

30.1

30.2

If, notwithstanding Sub-Clause 30.1, any damage occurs to any bridge or road communicating with or on the routes to the Site arising from the transport of materials or Plant, the Contractor shall notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damage or as soon as he receives any claim from the authority entitled to make such claim. Where under any law or regulation the haulier of such materials or Plant is required to indemnify the road authority against damage the Employer shall not be liable for any costs, charges or expenses in respect thereof or in relation thereto. In other cases the Employer shall negotiate the settlement of and pay all sums due in respect of such claim and shall indemnify the Contractor in respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto. Provided that if and so far as any such claim or part thereof is, in the opinion of the Engineer, due to any failure on the part of the Contractor to observe and perform his obligations under Sub-Clause 30.1, then the amount, determined by the Engineer, after due consultation with the Employer and the Contractor, to be due to such failure shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided also that the Employer shall notify the Contractor whenever a settlement is to be negotiated and, where any amount may be due from the Contractor, the Employer shall consult with the Contractor before such settlement is agreed.

### Waterborne Traffic

30.4

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 "road" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.

## Opportunities for Other Contractors

**31.1** The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable opportunities for carrying out their work to:

- (a) any other contractors employed by the Employer and their workmen,
- (b) the workmen of the Employer, and
- (c) the workmen of any 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.

### Facilities for Other Contractors

31.2

If, however, pursuant to Sub-Clause 31.1 the Contractor shall, on the written request of the Engineer:

(a) make available to any such other contractor, or to the Employer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible,

- (b) permit the use, by any such, of Temporary Works or Contractor's Equipment on the Site, or
- (c) provide any other service of whatsoever nature for any such,

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.

### Contractor to Keep Site Clear

32.1

During the execution of the Works the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Contractor's Equipment 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

33.1 Upon the issue of any Taking-Over Certificate the Contractor shall clear away and remove from that part of the Site to which such Taking-Over Certificate relates all Contractor's Equipment, surplus material, rubbish and Temporary Works of every kind, and leave such part of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer. Provided that the Contractor shall be entitled to retain on Site, until the end of the Defects Liability Period, such materials, Contractor's Equipment and Temporary Works as are required by him for the purpose of fulfilling his obligations during the Defects Liability Period.

### Labour

### **Engagement of Staff and Labour**

**34.1** The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

## Returns of Labour and Contractor's Equipment

35.1 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the 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 Equipment as the Engineer may require.

### Materials, Plant and Workmanship

### Quality of Materials, Plant and Workmanship

**36.1** All materials, Plant and workmanship shall be:

- (a) of the respective kinds described in the Contract and in accordance with the Engineer's instructions, and
- (b) subjected from time to time to such tests as the Engineer may require at the place of manufacture, fabrication or preparation, 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, labour, electricity, fuels, stores, apparatus and instruments as are normally required for examining, measuring and testing any materials or Plant 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 if the supply thereof is clearly intended by or provided for in the Contract.

#### **Cost of Tests**

**36.3** The cost of making any test shall be borne by the Contractor if such test is:

- (a) clearly intended by or provided for in the Contract, or
- (b) particularised in the Contract (in 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 purposes which it was intended to fulfil) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

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### Cost of Tests not Provided for

- **36.4** If any test required by the Engineer which is:
  - (a) not so intended by or provided for,
  - (b) (in the cases above mentioned) not so particularised, or
  - (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested,

shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case Sub-Clause 36.5 shall apply.

### Engineer's Determination where Tests not Provided for

**36.5** Where, pursuant to Sub-Clause 36.4, this Sub-Clause applies the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.

### Inspection of Operations

37.1

37.3

The Engineer, and any person authorised by him, shall at all reasonable times have access to the Site and to all workshops and places where materials or Plant are being manufactured, fabricated or prepared for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.

## Inspection and Testing

37.2 The Engineer shall be entitled, during manufacture, fabrication or preparation to inspect and test the materials and Plant to be supplied under the Contract. If materials or Plant are being manufactured, fabricated or prepared in workshops or places other than those of the Contractor, the Contractor shall obtain permission for the Engineer to carry out such inspection and testing in those workshops or places. Such inspection or testing shall not release the Contractor from any obligation under the Contract.

### Dates for Inspection and Testing

The Contractor shall agree with the Engineer on the time and place for the inspection or testing of any materials or Plant as provided in the Contract. The Engineer shall give the Contractor not less than 24 hours notice of his intention to carry out the inspection or to attend the tests. If the Engineer, or his duly authorised representative, does not attend on the date agreed, the Contractor may, unless otherwise instructed by the Engineer, proceed with the tests, which shall be deemed to have been made in the presence of the Engineer. The Contractor shall forthwith forward to the Engineer duly certified copies of the test readings. If the Engineer has not attended the tests, he shall accept the said readings as accurate.

#### Rejection 37.4

If, at the time and place agreed in accordance with Sub-Clause 37.3, the materials or Plant are not ready for inspection or testing or if, as a result of the inspection or testing referred to in this Clause, the Engineer determines that the materials or Plant are defective or otherwise not in accordance with the Contract, he may reject the materials or Plant and shall notify the Contractor thereof immediately. The notice shall state the Engineer's objections with reasons. The Contractor shall then promptly make good the defect or ensure that rejected materials or Plant comply with the Contract. If the Engineer so requests, the tests of rejected materials or Plant shall be made or repeated under the same terms and conditions. All costs incurred by the Employer by the repetition of the tests shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer and may be deducted from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

### Independent Inspection

37.5 The Engineer may delegate inspection and testing of materials or Plant to an independent inspector. Any such delegation shall be effected in accordance with Sub-Clause 2.4 and for this purpose such independent inspector shall be considered as an assistant of the Engineer. Notice of such appointment (not being less than 14 days) shall be given by the Engineer to the Contractor.

### Examination of Work before Covering up

38.1

38.2

39.2

40.1

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

## Uncovering and Making Openings

The Contractor shall uncover any part of the Works or make openings in or through the same as the Engineer may from time to time instruct and shall reinstate and make good such part. If any such part has been covered up or put out of view after compliance with the requirement of Sub-Clause 38.1 and is found to be executed in accordance with the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect of such of uncovering, making openings in or through, reinstating and making good the same, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer. In any other case all costs shall be borne by the Contractor.

### Removal of Improper Work, Materials or Plant

- **39.1** The Engineer shall have authority to issue instructions from time to time, for:
  - (a) the removal from the Site, within such time or times as may be specified in the instruction, of any materials or Plant which, in the opinion of the Engineer, are not in accordance with the Contract,
  - (b) the substitution of proper and suitable materials or Plant, and
  - (c) the removal and proper re-execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of
    - (i) materials, Plant or workmanship, or
    - (ii) design by the Contractor or for which he is responsible,

is not, in the opinion of the Engineer, in accordance with the Contract.

### Default of Contractor in Compliance

In case of default on the part of the Contractor in carrying out such instruction within the time specified therein or, if none, within a reasonable time, the Employer shall be entitled to employ and pay other persons to carry out the same and all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

### **Suspension**

### Suspension of Work

The Contractor shall, on the instructions of the Engineer, suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works or such part thereof so far as is necessary in the opinion of the Engineer. Unless such suspension is:

- (a) otherwise provided for in the Contract,
- (b) necessary by reason of some default of or breach of contract by the Contractor or for which he is responsible,

- (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 (save to the extent that such necessity arises from any act or default by the Engineer or the Employer or from any of the risks defined in Sub-Clause 20.4),

Sub-Clause 40.2 shall apply.

### Engineer's Determination following Suspension

- **40.2** Where, pursuant to Sub-Clause 40.1, this Sub-Clause applies the Engineer shall, after due consultation with the Employer and the Contractor, determine:
  - (a) any extension of time to which the Contractor is entitled under Clause 44, and
  - (b) the amount, which shall be added to the Contract Price, in respect of the cost incurred by the Contractor by reason of such suspension,

and shall notify the Contractor accordingly, with a copy to the Employer.

## Suspension lasting more than 84 Days

40.3

41.1

If the progress of the Works or any part thereof is suspended on the instructions of the Engineer and if permission to resume work is not given by the Engineer within a period of 84 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 give notice to the Engineer requiring permission, within 28 days from the receipt thereof, to proceed with the Works or that part thereof in regard to which progress is suspended. If, within the said time, such permission is not granted, the Contractor may, but is not bound to, elect to treat the suspension, where it affects part only of the Works, as an omission of such part under Clause 51 by giving a further notice to the Engineer to that effect, or, where it affects the whole of the Works, treat the suspension as an event of default by the Employer and terminate his employment under the Contract in accordance with the provisions of Sub-Clause 69.1, whereupon the provisions of Sub-Clauses 69.2 and 69.3 shall apply.

### **Commencement and Delays**

## Commencement of Works

The Contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to Tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

### Possession of Site and Access Thereto

**42.1** Save insofar as the Contract may prescribe:

- (a) the extent of portions of the Site of which the Contractor is to be given possession from time to time,
- (b) the order in which such portions shall be made available to the Contractor,

and, subject to any requirement in the Contract as to the order in which the Works shall be executed, the Employer will, with the Engineer's notice to commence the Works, give to the Contractor possession of

- (c) so much of the Site, and
- (d) such access as, in accordance with the Contract, is to be provided by the Employer 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, if any, and otherwise in accordance with such reasonable proposals as the Contractor shall, by notice to the Engineer with a copy to the Employer, make. The Employer 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 dispatch in accordance with such programme or proposals, as the case may be.

### Failure to Give Possession

- **42.2** If the Contractor suffers delay and/or incurs costs from failure on the part of the Employer to give possession in accordance with the terms of Sub-Clause 42. 1, the Engineer shall, after due consultation with the Employer and the Contractor, determine:
  - (a) any extension of time to which the Contractor is entitled under Clause 44, and
  - (b) the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

### Rights of Way and Facilities

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

## Time for Completion

43.1

The whole of the Works and, if applicable, any Section required to be completed within a particular time as stated in the Appendix to Tender, shall be completed, in accordance with the provisions of Clause 48, within the time stated in the Appendix to Tender for the whole of the Works or the Section (as the case may be), calculated from the Commencement Date, or such extended time as may be allowed under Clause 44.

## **Extension of Time** for Completion

44.1 In the event of:

- (a) the amount or nature of extra or additional work,
- (b) any cause of delay referred to in these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) any delay, impediment or prevention by the Employer, or
- (e) other special circumstances which may occur, other than through a default of or breach of contract by the Contractor or for which he is responsible,

being such as fairly to entitle the Contractor to an extension of the Time for Completion of the Works, or any Section or part thereof, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such extension and shall notify the Contractor accordingly, with a copy to the Employer.

### Contractor to Provide Notification and Detailed Particulars

- **44.2** Provided that the Engineer is not bound to make any determination unless the Contractor has
  - (a) within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and
  - (b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

### Interim Determination of Extension

44.3

Provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in Sub-Clause 44.2(b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event. On receipt of such interim particulars, the Engineer shall, without undue delay, make an interim determination of extension of time and, on receipt of the final particulars, the Engineer shall review all the circumstances and shall determine an overall extension of time in regard to the event. In both such cases the Engineer shall make his determination after due consultation with the Employer and the Contractor and shall notify the Contractor of the determination, with a copy to the Employer. No final review shall result in a decrease of any extension of time already determined by the Engineer.

### Restriction on Working Hours

45.1

46.1

47.1

47.2

Subject to any provision to the contrary contained in the Contract, none of the Works shall, save as hereinafter provided, be carried on during the night or on locally recognised days of rest without the consent of the Engineer, except when 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. Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by multiple shifts.

### **Rate of Progress**

If for any reason, which does not entitle the Contractor 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 comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. 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 considers that it is necessary to do any work at night or on locally recognised days of rest, he shall be entitled to seek the consent of the Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the Employer in additional supervision costs, such costs shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

### Liquidated Damages for Delay

If the Contractor fails to comply with the Time for Completion in accordance with Clause 48, for the whole of the Works or, if applicable, any Section within the relevant time prescribed by Clause 43, then the Contractor shall pay to the Employer the relevant sum stated in the Appendix to Tender as liquidated damages for such default and not as a penalty (which sum shall be the only monies due from the Contractor for such default) for every day or part of a day which shall elapse between the relevant Time for Completion and the date stated in a Taking-Over Certificate of the whole of the Works or the relevant Section, subject to the applicable limit stated in the Appendix to Tender. The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any monies due or to 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.

### Reduction of Liquidated Damages

If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking-Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

### Taking-Over Certificate

48.1

When the whole of the Works have been substantially completed and have satisfactorily passed any Tests on Completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer, with a copy to the Employer, accompanied by a written undertaking to finish with due expedition any outstanding work during the Defects Liability Period. Such notice and undertaking shall be deemed to be a request by the Contractor for the Engineer to issue a Taking-Over Certificate in respect of the Works. The Engineer shall, within 21 days of the date of delivery of such notice, either issue to the Contractor, with a copy to the Employer, a Taking-Over Certificate, stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract, or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, is required to be done by the Contractor before the issue of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the Works specified therein. The Contractor shall be entitled to receive such Taking-Over Certificate within 21 days of completion, to the satisfaction of the Engineer, of the Works so specified and remedying any defects so notified.

### Taking Over of Sections or Parts

- **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 Taking-Over Certificate in respect of:
  - (a) any Section in respect of which a separate Time for Completion is provided in the Appendix to Tender,
  - (b) any substantial part of the Permanent Works which has been both completed to the satisfaction of the Engineer and, otherwise than as provided for in the Contract, occupied or used by the Employer, or
  - (c) any part of the Permanent Works which the Employer has elected to occupy or use prior to completion (where such prior occupation or use is not provided for in the Contract or has not been agreed by the Contractor as a temporary measure).

## Substantial Completion of Parts

**48.3** If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Tests on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate 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 with due expedition any outstanding work in that part of the Permanent Works during the Defects Liability Period.

### Surfaces Requiring Reinstatement

**48.4** Provided that a Taking-Over Certificate given in respect of any Section or part of the Permanent Works before completion of the whole of the Works shall not be deemed to certify completion of any ground or surfaces requiring reinstatement, unless such Taking-Over Certificate shall expressly so state.

### **Defects Liability**

### Defects Liability Period

- **49.1** In these Conditions the expression "Defects Liability Period" shall mean the defects liability period named in the Appendix to Tender, calculated from:
  - (a) the date of completion of the Works certified by the Engineer in accordance with Clause 48, or
  - (b) in the event of more than one certificate having been issued by the Engineer under Clause 48, the respective dates so certified,

and in relation to the Defects Liability Period the expression "the Works" shall be construed accordingly.

© FIDIC 1987 21

### Completion of Outstanding Work and Remedying Defects

- 49.2 To the intent that the Works shall, at or as soon as practicable after the expiration of the Defects Liability Period, 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:
  - (a) complete the work, if any, outstanding on the date stated in the Taking-Over Certificate as soon as practicable after such date, and
  - (b) execute all such work of amendment, reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, during the Defects Liability Period or within 14 days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration, instruct the Contractor to execute.

### Cost of Remedying Defects

- 49.3 All work referred to in Sub-Clause 49.2 (b) shall be executed by the Contractor at his own cost if the necessity thereof is, in the opinion of the Engineer, due to:
  - (a) the use of materials, Plant or workmanship not in accordance with the Contract,
  - (b) where the Contractor is responsible for the design of part of the Permanent Works, any fault in such design, or
  - (c) the 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 is due to any other cause, he 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.

## Contractor's Failure to Carry Out Instructions

49.4

50.1

In case of default on the part of the Contractor in carrying out such instruction within a reasonable time, 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 cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

## Contractor to Search

If any defect, shrinkage or other fault in the Works appears at any time prior to the end of the Defects Liability Period, the Engineer may instruct the Contractor, with copy to the Employer, to search under the directions of the Engineer for the cause thereof. Unless such defect, shrinkage or other fault is one for which the Contractor is liable under the Contract, the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount in respect of the costs of such search incurred by the Contractor, which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer. If such defect, shrinkage or other fault is one for which the Contractor is liable, the cost of the work carried out in searching as aforesaid shall be borne by the Contractor and he shall in such case remedy such defect, shrinkage or other fault at his own cost in accordance with the provisions of Clause 49.

### 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 appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:

- (a) increase or decrease the quantity of any work included in the Contract,
- (b) omit any such work (but not if the omitted work is to be carried out by the Employer or by another contractor),

- (c) change the character or quality or kind of any such work,
- (d) change the levels, lines, position and dimensions of any part of the Works,
- (e) execute additional work of any kind necessary for the completion of the Works, or
- (f) change any specified sequence or timing of construction of any part of the Works.

No such variation shall in any way vitiate or invalidate the Contract, but the effect, if any, of all such variations shall be valued in accordance with Clause 52. Provided that where the issue of an instruction to vary the Works is necessitated by some default of or breach of contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.

#### Instructions for Variations

**51.2** 

The Contractor shall not make any such variation without an instruction of the Engineer. Provided that no instruction shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an instruction given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

### Valuation of Variations

**52.**1

All variations referred to in Clause 51 and any additions to the Contract Price which are required to be determined in accordance with Clause 52 (for the purposes of this Clause referred to as "varied work"), 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 varied work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which, after due consultation by the Engineer with the Employer and the Contractor, suitable rates or prices shall be agreed upon between the Engineer and the Contractor. In the event of disagreement the Engineer shall fix such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.

## Power of Engineer to Fix Rates

**52.2** 

Provided that if the nature or amount of any varied work relative to the nature or amount of the whole of the Works or to any part thereof, is 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 varied work, rendered inappropriate or inapplicable, then, after due consultation by the Engineer with the Employer and the Contractor, a suitable rate or price shall be agreed upon between the Engineer and the Contractor. In the event of disagreement the Engineer shall fix such other rate or price as is, in his opinion, appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on-account payments to be included in certificates issued in accordance with Clause 60.

Provided also that no varied work instructed to be done by the Engineer pursuant to Clause 51 shall be valued under Sub-Clause 52.1 or under this Sub-Clause unless, within 14 days of the date of such instruction and, other than in the case of omitted work, before the commencement of the varied work, notice shall have been given either:

- (a) by the Contractor to the Engineer of his intention to claim extra payment or a varied rate or price, or
- (b) by the Engineer to the Contractor of his intention to vary a rate or price.

### Variations Exceeding 15 per cent

52.3

If, on the issue of the Taking-Over Certificate for the whole of the Works, it is found that as a result of:

(a) all varied work valued under Sub-Clauses 52.1 and 52.2, and

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23

(b) all adjustments upon measurement of the estimated quantities set out in the Bill of Quantities, excluding Provisional Sums, dayworks and adjustments of price made under Clause 70,

but not from any other cause, there have been additions to or deductions from the Contract Price which taken together are in excess of 15 per cent of the "Effective Contract Price" (which for the purposes of this Sub-Clause shall mean the Contract Price, excluding Provisional Sums and allowance for dayworks, if any) then and in such event (subject to any action already taken under any other Sub-Clause of this Clause), after due consultation by the Engineer with the Employer and the Contractor, there shall be added to or deducted from the Contract Price such further sum as may be agreed between the Contractor and the Engineer or, failing agreement, determined by the Engineer having regard to the Contractor's Site and general overhead costs of the Contract. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer. Such sum shall be based only on the amount by which such additions or deductions shall be in excess of 15 per cent of the Effective Contract Price.

### Daywork 52.4

The Engineer may, if in his opinion it is necessary or desirable, issue an instruction that any varied work shall be executed on a daywork basis. The Contractor shall then be paid for such varied work under the terms set out in the daywork schedule included in the Contract and at the rates and prices affixed thereto by him in the 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 such of the Works executed on a daywork basis, the Contractor shall, during the continuance of such work, deliver each day to the Engineer an exact list in duplicate of the names, occupation and time of all workmen employed on such work and a statement, also in duplicate, showing the description and quantity of all materials and Contractor's Equipment used thereon or therefor other than Contractor's Equipment which is included in the percentage addition in accordance with such daywork schedule. One copy of each list and statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor.

At the end of each month the Contractor shall deliver to the Engineer a priced statement of the labour, materials and Contractor's Equipment, 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 considers that for any reason the sending of such lists or 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 the labour, materials and Contractor's Equipment used on such work, or at such value therefor as shall, in his opinion, be fair and reasonable.

### **Procedure for Claims**

### **Notice of Claims**

53.1

53.2

Notwithstanding any other provision of the Contract, if the Contractor intends to claim any additional payment pursuant to any Clause of these Conditions or otherwise, he shall give notice of his intention to the Engineer, with a copy to the Employer, within 28 days after the event giving rise to the claim has first arisen.

### Contemporary Records

Upon the happening of the event referred to in Sub-Clause 53.1, the Contractor shall keep such contemporary records as may reasonably be necessary to support any claim he may subsequently wish to make. Without necessarily admitting the Employer's liability, the Engineer shall, on receipt of a notice under Sub-Clause 53.1, inspect such contemporary records and may instruct the Contractor to keep

any further contemporary records as are reasonable and may be material to the claim of 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 so instructs.

### Substantiation of Claims

53.3

53.4

Within 28 days, or such other reasonable time as may be agreed by the Engineer, of giving notice under Sub-Clause 53.1, 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. 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 such intervals as the Engineer may reasonably require, send further interim accounts giving the accumulated amount of the claim and any further grounds upon which it is based. In cases where interim accounts are sent to the Engineer, the Contractor shall send a final account within 28 days of the end of the effects resulting from the event. The Contractor shall, if required by the Engineer so to do, copy to the Employer all accounts sent to the Engineer pursuant to this Sub-Clause.

### **Failure to Comply**

If the Contractor fails to comply with any of the provisions of this Clause in respect of any claim which he seeks to make, his entitlement to payment in respect thereof shall not exceed such amount as the Engineer or any arbitrator or arbitrators appointed pursuant to Sub-Clause 67.3 assessing the claim considers to be verified by contemporary records (whether or not such records were brought to the Engineer's notice as required under Sub-Clauses 53.2 and 53.3).

### Payment of Claims 53.5

The Contractor shall be entitled to have included in any interim payment certified by the Engineer pursuant to Clause 60 such amount in respect of any claim as the Engineer, after due consultation with the Employer and the Contractor, may consider due to the Contractor provided that the Contractor has supplied sufficient particulars to enable the Engineer to determine 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 of the Engineer. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.

## **Contractor's Equipment, Temporary Works** and Materials

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

54.1 All Contractor's 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

54.2 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

54.3 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

54.4 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.

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## Conditions of Hire of Contractor's Equipment

54.5

54.6

55.1

With a view to securing, in the event of termination under Clause 63, the continued availability, for the purpose of 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

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 the remedying of any defects therein.

### Incorporation of Clause in Subcontracts

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

### Approval of Materials not Implied

54.8 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

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

#### Works to be Measured

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 reasonable 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.

Should the Contractor not attend, or neglect or omit to send such representative, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of such 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 agreed. If the Contractor does not attend to examine and agree such records and drawings, they shall be taken to be correct. If, after examination of such records and 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 claimed by him to be incorrect. On receipt of such notice, the Engineer shall review the records and drawings and either confirm or vary them.

### Method of Measurement

### of

The Works shall be measured net, notwithstanding any general or local custom, except where otherwise provided for in the Contract.

### Breakdown of Lump Sum Items

**57.2** For the purposes of statements submitted in accordance with Sub-Clause 60.1, the Contractor shall submit to the Engineer, within 28 days after the receipt of the Letter of Acceptance, a breakdown for each of the lump sum items contained in the Tender. Such breakdowns shall be subject to the approval of the Engineer.

### **Provisional Sums**

### Definition of "Provisional Sum"



57.1

"Provisional Sum" means a sum included in the Contract and so designated in the Bill of Quantities for the execution of any part of the Works or for the supply of goods, materials, Plant or services, or for contingencies, which sum may be used, in whole or in part, or not at all, on the instructions of the Engineer. The Contractor shall be entitled to only such amounts in respect of the work, supply or contingencies to which such Provisional Sums relate as the Engineer shall determine in accordance with this Clause. The Engineer shall notify the Contractor of any determination made under this Sub-Clause, with a copy to the Employer.

### Use of Provisional Sums

58.2

In respect of every Provisional Sum the Engineer shall have authority to issue instructions for the execution of work or for the supply of goods, materials, Plant or services by:

- (a) the Contractor, in which case the Contractor shall be entitled to an amount equal to the value thereof determined in accordance with Clause 52, and
- (b) a nominated Subcontractor, as hereinafter defined, in which case the sum to be paid to the Contractor therefor shall be determined and paid in accordance with Sub-Clause 59.4.

## Production of Vouchers

58.3

The Contractor shall produce to the Engineer all quotations, invoices, vouchers and accounts or receipts in connection with expenditure in respect of Provisional Sums, except where work is valued in accordance with rates or prices set out in the Tender.

### **Nominated Subcontractors**

### Definition of "Nominated Subcontractors"

59.1

All specialists, merchants, tradesmen and others executing any work or supplying any goods, materials, Plant or services for which Provisional Sums are included in the Contract, who may have been or be nominated or selected or approved by the Employer or the Engineer, and all persons to whom by virtue of the provisions of the Contract the Contractor is required to subcontract shall, in the execution of such work or the supply of such goods, materials, Plant or services, be deemed to be subcontractors to the Contractor and are referred to in this Contract as "nominated Subcontractors".

### Nominated Subcontractors; Objection to Nomination

59.2

The Contractor shall not be required by the Employer or the Engineer, or be deemed to be under any obligation, to employ any nominated Subcontractor against whom the Contractor may raise reasonable objection, or who declines to enter into a subcontract with the Contractor containing provisions:

(a) that in respect of the work, goods, materials, Plant or services the subject of the subcontract, the nominated Subcontractor will undertake towards the Contractor such obligations and liabilities as will enable the Contractor to discharge his own obligations and liabilities towards the Employer under the terms of the Contract and will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection therewith, or arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities, and

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(b) that the nominated Subcontractor will save harmless and indemnify the Contractor from and against any negligence by the nominated Subcontractor, his agents, workmen and servants and from and against any misuse by him or them of any Temporary Works provided by the Contractor for the purposes of the Contract and from all claims as aforesaid.

### Design Requirements to be Expressly Stated

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If in connection with any Provisional Sum the services to be provided include any matter of design or specification of any part of the Permanent Works or of any Plant to be incorporated therein, such requirement shall be expressly stated in the Contract and shall be included in any nominated Subcontract. The nominated Subcontract shall specify that the nominated Subcontractor providing such services will save harmless and indemnify the Contractor from and against the same and from all claims, proceedings, damages, costs, charges and expenses whatsoever arising out of or in connection with any failure to perform such

### Payments to Nominated Subcontractors

For all work executed or goods, materials, Plant or services supplied by any nominated Subcontractor, the Contractor shall be entitled to:

obligations or to fulfil such liabilities.

- (a) the actual price paid or due to be paid by the Contractor, on the instructions of the Engineer, and in accordance with the subcontract;
- (b) in respect of labour supplied by the Contractor, the sum, if any, entered in the Bill of Quantities or, if instructed by the Engineer pursuant to paragraph (a) of Sub-Clause 58.2, as may be determined in accordance with Clause 52; and
- (c) in respect of all other charges and profit, a sum being a percentage rate of the actual price paid or due to be paid calculated, where provision has been made in the Bill of Quantities for a rate to be set against the relevant Provisional Sum, at the rate inserted by the Contractor against that item or, where no such provision has been made, at the rate inserted by the Contractor in the Appendix to Tender and repeated where provision for such is made in a special item provided in the Bill of Quantities for such purpose.

### Certification of Payments to Nominated Subcontractors

Before issuing, under Clause 60, any certificate, which includes any payment in respect of work done or goods, materials, Plant or services supplied by any nominated Subcontractor, the Engineer shall be entitled to demand from the Contractor reasonable proof that all payments, less retentions, included in previous certificates in respect of the work or goods, materials, Plant or services of such nominated Subcontractor have been paid or discharged by the Contractor. If the Contractor fails to supply such proof then, unless the Contractor:

- (a) satisfies the Engineer in writing that he has reasonable cause for withholding or refusing to make such payments, and
- (b) produces to the Engineer reasonable proof that he has so informed such nominated Subcontractor in writing,

the Employer shall be entitled to pay to such nominated Subcontractor direct, upon the certificate of the Engineer, all payments, less retentions, provided for in the nominated Subcontract, which the Contractor has failed to make to such nominated Subcontractor and to deduct by way of set-off the amount so paid by the Employer from any sums due or to become due from the Employer to the Contractor.

Provided that, where the Engineer has certified and the Employer has paid direct as aforesaid, the Engineer shall, in issuing any further certificate in favour of the Contractor, deduct from the amount thereof the amount so paid, direct as aforesaid, but shall not withhold or delay the issue of the certificate itself when due to be issued under the terms of the Contract.

#### **Certificates and Payment**

#### Monthly Statements

60.1

The Contractor shall submit to the Engineer after the end of each month six copies, each signed by the Contractor's representative approved by the Engineer in accordance with Sub-Clause 15.1, of a statement, in such form as the Engineer may from time to time prescribe, showing the amounts to which the Contractor considers himself to be entitled up to the end of the month in respect of:

- (a) the value of the Permanent Works executed,
- (b) any other items in the Bill of Quantities including those for Contractor's Equipment, Temporary Works, dayworks and the like,
- (c) the percentage of the invoice value of listed materials, all as stated in the Appendix to Tender, and Plant delivered by the Contractor on the Site for incorporation in the Permanent Works but not incorporated in such Works,
- (d) adjustments under Clause 70, and
- (e) any other sum to which the Contractor may be entitled under the Contract or otherwise.

#### **Monthly Payments**

60.2

The Engineer shall, within 28 days of receiving such statement, deliver to the Employer an Interim Payment Certificate stating the amount of payment to the Contractor which the Engineer considers due and payable in respect of such statement, subject:

- (a) firstly, to the retention of the amount calculated by applying the Percentage of Retention stated in the Appendix to Tender, to the amount to which the Contractor is entitled under paragraphs (a), (b), (c) and (e) of Sub-Clause 60.1 until the amount so retained reaches the Limit of Retention Money stated in the Appendix to Tender, and
- (b) secondly, to the deduction, other than pursuant to Clause 47, of any sums which may have become due and payable by the Contractor to the Employer.

Provided that the Engineer shall not be bound to certify any payment under this Sub-Clause if the net amount thereof, after all retentions and deductions, would be less than the Minimum Amount of Interim Payment Certificates stated in the Appendix to Tender.

Notwithstanding the terms of this Clause or any other Clause of the Contract no amount will be certified by the Engineer for payment until the performance security, if required under the Contract, has been provided by the Contractor and approved by the Employer.

#### Payment of Retention Money

60.3

- (a) Upon the issue of the Taking-Over Certificate with respect to the whole of the Works, one half of the Retention Money, or upon the issue of a Taking-Over Certificate with respect to a Section or part of the Permanent Works only such proportion thereof as the Engineer determines having regard to the relative value of such Section or part of the Permanent Works, shall be certified by the Engineer for payment to the Contractor.
- (b) Upon the expiration of the Defects Liability Period for the Works the other half of the Retention Money shall be certified by the Engineer for payment to the Contractor. Provided that, in the event of different Defects Liability Periods having become applicable to different Sections or parts of the Permanent Works pursuant to Clause 48, the expression "expiration of the Defects Liability Period" shall, for the purposes of this Sub-Clause, be deemed to mean the expiration of the latest of such periods. Provided also that if at such time there shall remain to be executed by the Contractor any work instructed, pursuant to Clauses 49 and 50, in respect of the Works, the Engineer shall be entitled to withhold certification until completion of such work of so much of the balance of the Retention Money as shall, in the opinion of the Engineer, represent the cost of the work remaining to be executed.

#### Correction of Certificates

60.4

The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim Payment Certificate which shall have been issued by him and shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

### Statement at Completion

60.5

60.6

- Not later than 84 days after the issue of the Taking-Over Certificate in respect of the whole of the Works, the Contractor shall submit to the Engineer six copies of a Statement at Completion with supporting documents showing in detail, in the form approved by the Engineer:
  - (a) the final value of all work done in accordance with the Contract up to the date stated in such Taking-Over Certificate,
  - (b) any further sums which the Contractor considers to be due, and
  - (c) an estimate of amounts which the Contractor considers will become due to him under the Contract.

The estimated amounts shall be shown separately in such Statement at Completion. The Engineer shall certify payment in accordance with Sub-Clause 60.2.

#### Final Statement

Not later than 56 days after the issue of the Defects Liability Certificate pursuant to Sub-Clause 62.1, the Contractor shall submit to the Engineer for consideration six copies of a draft final statement with supporting documents showing in detail, in the form approved by the Engineer:

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

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

If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer an Interim Payment Certificate for those parts of the draft final statement, if any, which are not in dispute. The dispute may then be settled in accordance with Clause 67.

#### Discharge 60.7

60.8

60.9

Upon submission of the Final Statement, the Contractor shall give to the Employer, with a copy to the Engineer, a written discharge confirming that the total of the Final Statement represents full and final settlement of all monies due to the Contractor arising out of or in respect of the Contract. Provided that such discharge shall become effective only after payment due under the Final Payment Certificate issued pursuant to Sub-Clause 60.8 has been made and the performance security referred to in Sub-Clause 10.1, if any, has been returned to the Contractor.

#### Final Payment Certificate

Within 28 days after receipt of the Final Statement, and the written discharge, the Engineer shall issue to the Employer (with a copy to the Contractor) a Final Payment Certificate stating:

- (a) the amount which, in the opinion of the Engineer, is finally due under the Contract or otherwise, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled other than under Clause 47, the balance, if any, due from the Employer to the Contractor or from the Contractor to the Employer as the case may be.

#### Cessation of Employer's Liability

The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or execution of the Works, unless the Contractor shall have included a claim in respect thereof in his Final Statement and (except in respect of matters or things arising after the issue of the Taking-Over Certificate in respect of the whole of the Works) in the Statement at Completion referred to in Sub-Clause 60.5.

#### Time for Payment 60.10

The amount due to the Contractor under any Interim Payment Certificate issued by the Engineer pursuant to this Clause, or to any other term of the Contract, shall, subject to Clause 47, be paid by the Employer to the Contractor within 28 days after such Interim Payment Certificate has been delivered to the Employer, or, in the case of the Final Payment Certificate referred to in Sub-Clause 60.8, within 56 days, after such Final Payment Certificate has been delivered to the Employer. In the event of the failure of the Employer to make payment within the times stated, the Employer shall pay to the Contractor interest at the rate stated in the Appendix to Tender upon all sums unpaid from the date by which the same should have been paid. The provisions of this Sub-Clause are without prejudice to the Contractor's entitlement under Clause 69 or otherwise.

#### Approval only by Defects Liability Certificate

Only the Defects Liability Certificate, referred to in Clause 62, shall be deemed to constitute approval of the Works.

#### Defects Liability Certificate

62.1 The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the Works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or, if different defects liability periods shall become applicable to different Sections or parts of the Permanent Works, the expiration of the latest such period, or as soon thereafter as any works instructed, pursuant to Clauses 49 and 50, have been completed to the satisfaction of the Engineer. Provided that the issue of the Defects Liability Certificate shall not be a condition precedent to payment to the Contractor of the second portion of the Retention Money in accordance with the conditions set out in Sub-Clause 60.3.

#### Unfulfilled Obligations

62.2 Notwithstanding the issue of the Defects Liability Certificate the Contractor and the Employer shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the issue of the Defects Liability Certificate which remains unperformed at the time such Defects Liability Certificate is issued and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the parties to the Contract.

#### Remedies

### Default of Contractor

63.1

If the Contractor is deemed by law unable to pay his debts as they fall due, or enters into voluntary or involuntary bankruptcy, liquidation or dissolution (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or becomes insolvent, or makes an arrangement with, or assignment in favour of, his creditors, or agrees to carry out the Contract under a committee of inspection of his creditors, or if a receiver, administrator, trustee or liquidator is appointed over any substantial part of his assets, or if, under any law or regulation relating to reorganization, arrangement or readjustment of debts, proceedings are commenced against the Contractor or resolutions passed in connection with dissolution or liquidation or if any steps are taken to enforce any security interest over a substantial part of the assets of the Contractor, or if any act is done or event occurs with respect to the Contractor or his assets which, under any applicable law has a substantially similar effect to any of the foregoing acts or events, or if the Contractor has contravened Sub-Clause 3.1, or has an execution levied on his goods, or if the Engineer certifies to the Employer, with a copy to the Contractor, that, in his opinion, the Contractor:

- (a) has repudiated the Contract,
- (b) without reasonable excuse has failed
  - (i) to commence the Works in accordance with Sub-Clause 41.1, or
  - (ii) to proceed with the Works, or any Section thereof, within 28 days after receiving notice pursuant to Sub-Clause 46.1,

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- (c) has failed to comply with a notice issued pursuant to Sub-Clause 37.4 or an instruction issued pursuant to Sub-Clause 39.1 within 28 days after having received it,
- (d) despite previous warning from the Engineer, in writing, is otherwise persistently or flagrantly neglecting to comply with any of his obligations under the Contract, or
- (e) has contravened Sub-Clause 4.1,

then the Employer may, after giving 14 days' notice to the Contractor, enter upon the Site and the Works and terminate the employment of the Contractor without thereby releasing the Contractor from any of his obligations or liabilities under the Contract, or affecting the rights and authorities conferred on the Employer or the Engineer by the Contract, and may himself complete the Works or may employ any other contractor to complete the Works. The Employer or such other contractor may use for such completion so much of the Contractor's Equipment, Temporary Works and materials as he or they may think proper.

### Valuation at Date of Termination

- 63.2 The Engineer shall, as soon as may be practicable after any such entry and termination by the Employer, fix and determine ex parte, or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute, and shall certify:
  - a) what amount (if any) had, at the time of such entry and termination, been reasonably earned by or would reasonably accrue to the Contractor in respect of work then actually done by him under the Contract, and
  - (b) the value of any of the said unused or partially used materials, any Contractor's Equipment and any Temporary Works.

#### Payment after Termination

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63.4

64.1

If the Employer terminates the Contractor's employment under this Clause, he shall not be liable to pay to the Contractor any further amount (including damages) in respect of the Contract until the expiration of the Defects Liability Period and there after until the costs of execution, completion and remedying of any defects, damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum (if any) as the Engineer may certify would have been payable to him upon due completion by him after deducting the said amount. If such amount exceeds the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall, upon demand, pay to the Employer the amount of such excess and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly.

#### Assignment of Benefit of Agreement

Unless prohibited by law, the Contractor shall, if so instructed by the Engineer within 14 days of such entry and termination referred to in Sub-Clause 63.1, assign to the Employer the benefit of any agreement for the supply of any goods or materials or services and/or for the execution of any work for the purposes of the Contract, which the Contractor may have entered into.

### Urgent Remedial Work

If, by reason of any accident, or failure, or other event occurring to, in, or in connection with the Works, or any part thereof, either during the execution of the Works, or during the Defects Liability Period, any remedial or other work is, in the opinion of the Engineer, urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work, the Employer shall be entitled to employ and pay other persons to carry out such work as the Engineer may consider necessary. If the work or repair so done by the Employer is work which, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided that the Engineer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof.

#### **Special Risks**

#### No Liability for Special Risks

- 65.1 The Contractor shall be under no liability whatsoever in consequence of any of the special risks referred to in Sub-Clause 65.2, whether by way of indemnity or otherwise, for or in respect of:
  - (a) destruction of or damage to the Works, save to work condemned under the provisions of Clause 39 prior to the occurrence of any of the said special risks,
  - (b) destruction of or damage to property, whether of the Employer or third parties, or
  - (c) injury or loss of life.

#### Special Risks

**65.2** The special risks are:

65.3

65.5

- (a) the risks defined under paragraphs (a), (c), (d) and (e) of Sub-Clause 20.4, and
- (b) the risks defined under paragraph (b) of Sub-Clause 20.4 insofar as these relate to the country in which the Works are to be executed.

#### Damage to Works by Special Risks

- If the Works or any materials or Plant on or near or in transit to the Site, or any of the Contractor's Equipment, sustain destruction or damage by reason of any of the said special risks, the Contractor shall be entitled to payment in accordance with the Contract for any Permanent Works duly executed and for any materials or Plant so destroyed or damaged and, so far as may be required by the Engineer or as may be necessary for the completion of the Works, to payment for:
  - (a) rectifying any such destruction or damage to the Works, and
  - (b) replacing or rectifying such materials or Contractor's Equipment,

and the Engineer shall determine an addition to the Contract Price in accordance with Clause 52 (which shall in the case of the cost of replacement of Contractor's Equipment include the fair market value thereof as determined by the Engineer) and shall notify the Contractor accordingly, with a copy to the Employer.

#### Projectile, Missile

**65.4** Destruction, damage, injury or loss of life caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade, or other projectile, missile, munition, or explosive of war, shall be deemed to be a consequence of the said special risks.

#### Increased Costs arising from Special Risks

Save to the extent that the Contractor is entitled to payment under any other provision of the Contract, the Employer shall repay to the Contractor any costs of the execution of the Works (other than such as may be attributable to the cost of reconstructing work condemned under the provisions of Clause 39 prior to the occurrence of any special risk) which are howsoever attributable to or consequent on or the result of or in any way whatsoever connected with the said special risks, subject however to the provisions in this Clause hereinafter contained in regard to outbreak of war, but the Contractor shall, as soon as any such cost comes to his knowledge, forthwith notify the Engineer thereof. The Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of the Contractor's costs in respect thereof which shall be added to the Contract Price and shall notify the Contractor accordingly, with a copy to the Employer.

#### Outbreak of War 65.6

If, during the currency of the Contract, there is an outbreak of war, whether war is declared or not, in any part of the world which, whether financially or otherwise, materially affects the execution of the Works, the Contractor shall, unless and until the Contract is terminated under the provisions of this Clause, continue to use his best endeavours to complete the execution of the Works. Provided that the Employer shall be entitled, at any time after such outbreak of war, to terminate the Contract by giving notice to the Contractor and, upon such notice being given, the Contract shall, except as to the rights of the parties under this Clause and Clause 67, terminate, but without prejudice to the rights of either party in respect of any antecedent breach thereof.

#### Removal of Contractor's Equipment on Termination

#### Payment if Contract Terminated

- 65.7 If the Contract is terminated under the provisions of Sub-Clause 65.6, the Contractor shall, with all reasonable dispatch, remove from the Site all Contractor's Equipment and shall give similar facilities to his Subcontractors to do so.
- 65.8 If the Contract is terminated as aforesaid, the Contractor shall be paid by the Employer, insofar as such amounts or items have not already been covered by payments on account made to the Contractor, for all work executed prior to the date of termination at the rates and prices provided in the Contract and in addition:
  - (a) the amounts payable in respect of any preliminary items referred to in the Bill of Quantities, so far as the work or service comprised therein has been carried out or performed, and a proper proportion of any such items which have been partially carried out or performed;
  - (b) the cost of materials, Plant or goods reasonably ordered for the Works which have been delivered to the Contractor or of which the Contractor is legally liable to accept delivery, such materials, Plant or goods becoming the property of the Employer upon such payments being made by him;
  - (c) a sum being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works insofar as such expenditure has not been covered by any other payments referred to in this Sub-Clause:
  - (d) any additional sum payable under the provisions of Sub-Clauses 65.3 and 65.5;
  - (e) such proportion of the cost as may be reasonable, taking into account payments made or to be made for work executed, of removal of Contractor's Equipment under Sub-Clause 65.7 and, if required by the Contractor, return thereof to the Contractor's main plant yard in his country of registration or to other destination, at no greater cost; and
  - (f) the reasonable cost of repatriation of all the Contractor's staff and workmen employed on or in connection with the Works at the time of such termination.

Provided that against any payment due from the Employer under this Sub-Clause, the Employer shall be entitled to be credited with any outstanding balances due from the Contractor for advances in respect of Contractor's Equipment, materials and Plant and any other sums which, at the date of termination, were recoverable by the Employer from the Contractor under the terms of the Contract. Any sums payable under this Sub-Clause shall, after due consultation with the Employer and the Contractor, be determined by the Engineer who shall notify the Contractor accordingly, with a copy to the Employer.

#### **Release from Performance**

# Payment in Event of Release from Performance

66.1

If any circumstance outside the control of both parties arises after the issue of the Letter of Acceptance which renders it impossible or unlawful for either or both parties to fulfil his or their contractual obligations, or under the law governing the Contract the parties are released from further performance, then the parties shall be discharged from the Contract, except as to their rights under this Clause and Clause 67 and without prejudice to the rights of either party in respect of any antecedent breach of the Contract, and the sum payable by the Employer to the Contractor in respect of the work executed shall be the same as that which would have been payable under Clause 65 if the Contract had been terminated under the provisions of Clause 65.

#### **Settlement of Disputes**

### Engineer's Decision

67.1

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

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

If either the Employer or the Contractor be dissatisfied with any decision of the Engineer, or if the Engineer fails to give notice of his decision on or before the eighty-fourth day after the day on which he received the reference, then either the Employer or the Contractor may, on or before the seventieth day after the day on which he received notice of such decision, or on or before the seventieth day after the day on which the said period of 84 days expired, as the case may be, give notice to the other party, with a copy for information to the Engineer, of his intention to commence arbitration, as hereinafter provided, as to the matter in dispute. Such notice shall establish the entitlement of the party giving the same to commence arbitration, as hereinafter provided, as to such dispute and, subject to Sub-Clause 67.4, no arbitration in respect thereof may be commenced unless such notice is given.

If the Engineer has given notice of his decision as to a matter in dispute to the Employer and the Contractor and no notice of intention to commence arbitration as to such dispute has been given by either the Employer or the Contractor on or before the seventieth day after the day on which the parties received notice as to such decision from the Engineer, the said decision shall become final and binding upon the Employer and the Contractor.

#### Amicable Settlement

Where notice of intention to commence arbitration as to a dispute has been given in accordance with Sub-Clause 67.1, the parties shall attempt to settle such dispute amicably before the commencement of arbitration. Provided that, unless the parties otherwise agree, arbitration may be commenced on or after the fifty-sixth day after the day on which notice of intention to commence arbitration of such dispute was given, even if no attempt at amicable settlement thereof has been made.

#### **Arbitration** 67.3 Any dispute in respect of which:

67.2

- (a) the decision, if any, of the Engineer has not become final and binding pursuant to Sub-Clause 67.1, and
- (b) amicable settlement has not been reached within the period stated in Sub-Clause 67.2,

shall be finally settled, unless otherwise specified in the Contract, under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed under such Rules. The said arbitrator/s shall have full power to open up, review and revise any decision, opinion, instruction, determination, certificate or valuation of the Engineer related to the dispute.

Neither party shall be limited in the proceedings before such arbitrator/s to the evidence or arguments put before the Engineer for the purpose of obtaining his said decision pursuant to Sub-Clause 67.1. No such decision shall disqualify the Engineer from being called as a witness and giving evidence before the arbitrator/s on any matter whatsoever relevant to the dispute.

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

## Failure to Comply with Engineer's Decision

Where neither the Employer nor the Contractor has given notice of intention to commence arbitration of a dispute within the period stated in Sub-Clause 67.1 and the related decision has become final and binding, either party may, if the other party fails to comply with such decision, and without prejudice to any other rights it may have, refer the failure to arbitration in accordance with Sub-Clause 67.3. The provisions of Sub-Clauses 67.1 and 67.2 shall not apply to any such reference.

#### **Notices**

67.4

68.2

68.3

69.2

69.3

### Notice to Contractor

68.1 All certificates, notices or instructions to be given to the Contractor by the Employer or the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the Contractor's principal place of business or such other address as the Contractor shall nominate for that purpose.

#### Notice to Employer and Engineer

Any notice to be given to the Employer or to the Engineer under the terms of the Contract shall be sent by post, cable, telex or facsimile transmission to or left at the respective addresses nominated for that purpose in Part II of these Conditions.

### Change of Address

Either party may change a nominated address to another address in the country where the Works are being executed by prior notice to the other party, with a copy to the Engineer, and the Engineer may do so by prior notice to both parties.

#### **Default of Employer**

#### Default of Employer

**69.1** In the event of the Employer:

- (a) failing to pay to the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 60.10 within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract,
- (b) interfering with or obstructing or refusing any required approval to the issue of any such certificate,
- (c) becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or
- (d) giving notice to the Contractor that for unforeseen economic reasons it is impossible for him to continue to meet his contractual obligations,

the Contractor shall be entitled to terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer. Such termination shall take effect 14 days after the giving of the notice.

#### Removal of Contractor's Equipment

Upon the expiry of the 14 days' notice referred to in Sub-Clause 69.1, the Contractor shall, notwithstanding the provisions of Sub-Clause 54.1, with all reasonable despatch, remove from the Site all Contractor's Equipment brought by him thereon.

#### Payment on Termination

In the event of such termination the Employer shall be under the same obligations to the Contractor in regard to payment as if the Contract had been terminated under the provisions of Clause 65, but, in addition to the payments specified in Sub-Clause 65.8, the Employer shall pay to the Contractor the amount of any loss or damage to the Contractor arising out of or in connection with or by consequence of such termination.

# Contractor's Entitlement to Suspend Work

69.4 Without prejudice to the Contractor's entitlement to interest under Sub-Clause 60.10 and to terminate under Sub-Clause 69.1, the Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 28 days after the expiry of the time stated in Sub-Clause 60.10 within which payment is to be made, subject to any deduction that the Employer is entitled to make under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work.

If the Contractor suspends work or reduces the rate of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs costs the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44, and
- (b) the amount of such costs, which shall be added to the Contract Price,

and shall notify the Contractor accordingly, with a copy to the Employer.

### Resumption of Work

69.5

70.2

Where the Contractor suspends work or reduces the rate of work, having given notice in accordance with Sub-Clause 69.4, and the Employer subsequently pays the amount due, including interest pursuant to Sub-Clause 60.10, the Contractor's entitlement under Sub-Clause 69.1 shall, if notice of termination has not been given, lapse and the Contractor shall resume normal working as soon as is reasonably possible.

#### **Changes in Cost and Legislation**

#### Increase or Decrease of Cost

70.1 There shall be added to or deducted from the Contract Price such sums in respect of rise or fall in the cost of labour and/or materials or any other matters affecting the cost of the execution of the Works as may be determined in accordance with Part II of these Conditions.

#### Subsequent Legislation

If, after the date 28 days prior to the latest date for submission of tenders for the Contract there occur in the country in which the Works are being or are to be executed changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or the introduction of any such State Statute, Ordinance, Decree, Law, regulation or bye-law which causes additional or reduced cost to the Contractor, other than under Sub-Clause 70.1, in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price- and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

#### **Currency and Rates of Exchange**

#### Currency Restrictions

71.1 If, after the date 28 days prior to the latest date for submission of tenders for the Contract, the Government or authorised agency of the Government of the country in which the Works are being or are to be executed imposes currency restrictions and/or transfer of currency restrictions in relation to the currency or currencies in which the Contract Price is to be paid, the Employer shall reimburse any loss or damage to the Contractor arising therefrom, without prejudice to the right of the Contractor to exercise any other rights or remedies to which he is entitled in such event.

#### Rates of Exchange

**72.1** Where the Contract provides for payment in whole or in part to be made to the Contractor in foreign currency or currencies, such payment shall not be subject to variations in the rate or rates of exchange between such specified foreign currency or currencies and the currency of the country in which the Works are to be executed.

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### **Currency Proportions**

72.2

72.3

Where the Employer has required the Tender to be expressed in a single currency but with payment to be made in more than one currency and the Contractor has stated the proportions or amounts of other currency or currencies in which he requires payment to be made, the rate or rates of exchange applicable for calculating the payment of such proportions or amounts shall, unless otherwise stated in Part II of these Conditions, be those prevailing, as determined by the Central Bank of the country in which the Works are to be executed, on the date 28 days prior to the latest date for the submission of tenders for the Contract, as has been notified to the Contractor by the Employer prior to the submission of tenders or as provided for in the Tender.

#### Currencies of Payment for Provisional Sums

Where the Contract provides for payment in more than one currency, the proportions or amounts to be paid in foreign currencies in respect of Provisional Sums shall be determined in accordance with the principles set forth in Sub-Clauses 72.1 and 72.2 as and when these sums are utilised in whole or in part in accordance with the provisions of Clauses 58 and 59.

#### REFERENCE TO PART II

As stated in the Foreword at the beginning of this document, the FIDIC Conditions comprise both Part I and Part II. Certain Clauses, namely Sub-Clauses 1.1 paragraph (a) (i) and (iv), 5.1 (part), 14.1, 14.3, 68.2 and 70.1 must include additional wording in Part II for the Conditions to be complete. Other Clauses may require additional wording to supplement Part I or to cover particular circumstances or the type of work (dredging is an example).

Part II Conditions of Particular Application with guidelines for the preparation of Part II are printed in a separately bound document.

### **PART I - GENERAL CONDITIONS**

Index	Clause
Access to Site	42.1
Access to Works, Engineer	37.1
Access, Contractor to Satisfy Himself	11.1
Accident or Injury to Workmen – Insurance Against	24.2
Accident or Injury to Workmen – Liability for	24.1
Address, Change of	68.3
Adequacy of Insurance	25.2
Adjustment of Contract Price if Variations Exceed 15 per cent of Tender Sum Agreement	52.3 9.1
Alterations, Additions and Omissions	51.
	<b>&amp;</b> 52.
Ambiguities in Contract Documents	5.2
Amicable Settlement of Disputes	67.2
Appointment of Assistants to Engineer	2.4
Approval by the Engineer	7.3
Approval of Materials not Implied	54.8
Approval Only by Defects Liability Certificate	61.1
Arbitration	67.3
Assignment of Contract	3.1
Avoidance of Damage to Roads	30.1
Bills of Quantities – Estimated Only	55.1
Boreholes and Exploratory Excavation	18.1
Breakdown of Lump Sum Items	57.2
Care of Works	20.1
Cash Flow Estimate to be Submitted	14.3
Certificate, Final Payment	60.8
Certificates and Payment, Monthly Statements	60.1
Certificates, Correction of	60.4
Certificate, Taking-Over	48.1
Certification of Completion of Works	48.1
Certification of Completion of Sections or Parts	48.2
Cessation of Employer's Liability	60.9
Change of Address, Notice of	68.3
Claims, Contemporary Records	53.2
Claims, Notice of	53.1
Claims, Payment of	53.5
Claims, Substantiation of	53.3
Claims Under Performance Security	10.3
Clearance of Site on Completion	33.1
Commencement of Works	41.1
Completion of Works, Time for	43.1
Completion of Works, Time for, Extension of	44.1
Completion, Statement at	60.5
Compliance with Insurance Policy Conditions	25.4
Compliance with Statutes and Regulations	26.1
Contemporary Records for Claims	53.2
Contract Agreement	9.1
Contractor Not Relieved of Duties or Responsibilities	14.4
Contractor's Employees	16.1
Contractor's Employees, Engineer at Liberty to Object	16.2
Contractor's Entitlement to Suspend Work for Employer's Default	69.4
Contractor's Equipment, Conditions of Hire	54.5
Contractor's Equipment, Employer not Liable for Damage	54.2

Index	Clause
Contractor's Equipment, Insurance of	21.1
Contractor's Equipment, Reference in Subcontracts	54.7
Contractor's Equipment, Temporary Works and Materials;	
Exclusive Use for the Works	54.1
Contractor's Equipment, Transport of	30.2
Contractor's Failure to Carry Out Instructions	49.4
Contractor's Failure to Insure, Remedy	25.3
Contractor's General Responsibilities	8.1
Contractor's Superintendence	15.1
Contractor to Keep Site Clear	32.1
Contractor to Search	50.1 60.4
Correction of Certificates	49.3
Cost of Remedying Defects	36.2
Cost of Samples Cost of Tests	36.3
Cost of Tests not Provided for	36.4
Covering up Work, Examination Before	38.1
Cross Liabilities	23.3
Currencies of Payment for Provisional Sums	72.3
Currencies, Rates of Exchange	72.1
Currency Restrictions	71.1
Custody and Supply of Drawings and Documents	6.1
Customs Clearance	54.3
Damage to Persons and Property	22.1
Damage to Roads, Avoidance of	30.1
Damage to Works, Special Risks	65.3
Damages, Liquidated	47.1
Dates for Inspection and Testing	37.3
Daywork	52.4
Decrease or Increase of Costs	70.1
Default of Contractor in Compliance with Instructions on Improper Work	39.2
Default of Contractor, Remedies for	63.1
Default of Employer	69.1
Defective Materials and Work	39.1
Defects, Contractor to Search for, if Required	50.1
Defects, Cost of Remedying	49.3
Defects Liability Certificate	62.1
Defects Liability Period	49.1
Defects, Remedying of	49.2 1.1
Definitions  Definitions	47.1
Delay, Liquidated Damages for	6.4
Delays and Cost of Delay of Drawings	59.3
Design by Nominated Subcontractors	60.7
Discharge Discrepancies in Documents	5.2
Dismissal of Contractor's Employees	16.2
Disorderly Conduct, etc.	34.1
Disputes, Engineer's Decision	67.1
Disruption of Progress	6.3
Documents Mutually Explanatory	5.2
Drawings	6 & 7
Drawings and Documents – Custody and Supply of	6.1
Drawings and Instructions – Supplementary	7.1
Drawings, Copy to be Kept on Site	6.2
Drawings, Delays and Cost of Delay of Drawings	6.4
Drawings, Failure by Contractor to Submit	6.5

Employer not Liable for Damage to Contractor's Equipment etc.

54.2

Index	Clause
Employer's Liability, Cessation of	60.9
Employer's Responsibilities	19.2
Employer's Risks	20.4
Engagement of Staff and Labour	
Engineer's Authority to Delegate	34.1 2.3
Engineer's Petermination Where Tests not Provided for	2.3 36.5
Engineer's Duties and Authority	36.5 2.1
Engineer to Act Impartially	2.1
Environment – Protection of	19.1
Errors in Setting Out	17.1
Evidence and Terms of Insurance	25.1
Examination of Work before Covering Up	38.1
Exceptions	22.2
Exchange, Rates of	72.1
Exclusions	21.4
Extension of Time, due to Employer's Failure to give Possession of Site	42.2
Extension of Time for Completion	44.1
Extension of Time for Completion, Contractor's Claim	44.2
Extension of Time for Completion, Engineer's Determination	44.3
Extraordinary Traffic	30.
Facilities for Other Contractors	31.2
Facilities – Rights of Way and	42.3
Failure by Contractor to Submit Drawings	6.5
Failure to Comply with Claims Procedure	53.4
Failure to Comply with Engineer's Decision	67.4
Failure to Give Possession of Site	42.2
Faulty Work, Removal of	39.1
Fees and Notices	26.1
Fencing, Watching, Lighting, etc.	19.1
Final Payment Certificate	60.8
Final Statement	60.6
Foreign Currencies, Payment in	72.
Fossils	27.1
Foundations, Examination of	38.1
General Responsibilities of Contractor	8.1
Giving of Notices – Payment of Fees	26.1
Headings and Marginal Notes	1.2
Improper Work and Materials, Removal of	39.1
Increase or Decrease of Costs	70.1
Indemnity by Contract	22.1
	& 24.1
Indemnity by Employer	22.3
Independent Inspection	37.5
Injury to Persons – Damage to Property	22.1
Injury to Workmen	24.1
Inspection and Testing	37.2
Inspection and Testing, Dates for	37.3
Inspection of Foundations, etc.	38.1
Inspection of Operations	37.1
Inspection of Site by Contractor	11.1
Instructions for Variations	51.2
Instructions in Writing Instructions, Supplementary	2.5
Insurance, Adequacy of	7.1 25.2
	۷.۷

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iii

Index	Clause
Insurance, Evidence and Terms of	25.1
Insurance, Minimum Amount of	23.2
Insurance of Works and Contractor's Equipment	21.1
Insurance, Remedy on Failure to Insure	25.3
Insurance, Responsibility for Amounts not Recovered	21.3
Insurance, Scope of Cover	21.2
Insurance, Third Party	23.1
Insurance, Workmen	24.2
Interference with Traffic and Adjoining Properties	29.1
Interim Determination of Extension	44.3
Interpretations	1.3
Labour, Engagement of	34.1
Language/s and Law	5.1
Law to which Contract Subject	5.1
Legislation, Subsequent Lighting, Fencing, Watching, etc.	70.2 19.1
Liquidated Damages for Delay	47.1
Liquidated Damages, Reduction of	47.2
Loss or Damage due to Employer's Risks	20.3
Loss or Damage – Responsibility to Rectify	20.2
Lump Sum Items – Breakdown of	57.2
Materials and Plant, Transport of	30.3
Materials – Approval of, etc, not Implied	54.8
Materials, Improper – Removal of	39.1
Materials, Quality of	36.1
Materials, Supply of	8.1
Measurement by Engineer	56.1
Measurement, Method of	57.1
Measurement, Quantities Estimated Only	55.1
Methods of Construction	8.2
Minimum Amount of Insurance	23.2
Monthly Payments	60.2
Nominated Subcontractors, Certification of Payments to	59.5
Nominated Subcontractors, Definition	59.1
Nominated Subcontractors, Design by	59.3
Nominated Subcontractors, Objection to Nomination	59.2
Nominated Subcontractors, Payment to	59.4
Not Foreseeable Physical Obstructions or Conditions	12.2
Notice of Claims	53.1
Notices and Fees, Payment of	26.1
Notices, Consents and Approvals	1.5
Notice to Contractor	68.1
Notice to Employer and Engineer	68.2
Objections to Contractor's Employees	16.2
Obstructions or Conditions – Not Foreseeable Physical	12.2
Omissions, Alterations and Additions	59.
Openings, Uncovering and making	38.2
Operations, Inspection of	37.1
Order of Work, Contractor to Furnish Programme	14.1
Other Contractors, Opportunities for	31.1
Patent Rights	28.1
Payment if Contract Terminated for Contractor's Default	63.3
Payment of Claims	69.3 53.5
FAVOROU DE LABOR	h'4 h

iv © FIDIC 1987

Index	Clause
Payment, Time for	60.10
Performance Security	10.1
Performance Security – Claims Under	10.3
Performance Security – Period of Validity	10.2
Period of Defects Liability	49.1
Permanent Works Designed by Contractor	7.2
Physical Obstructions or Conditions – Not Foreseeable	12.2
Physical Obstructions or Conditions – Engineer's Determination	12.3
Plant and Materials, Transport of	30.3
Plant, Conditions of Hire	54.5
Plant, Customs Clearance	54.3
Plant, Employer not Liable for damage to	54.2
Plant, etc. – Exclusive Use for the Works	54.1
Plant, Quality of	<b>36.</b> 1
Plant, Re-export of	54.4
Plant, Removal of	39.1
Policy of Insurance – Compliance with Conditions	25.4
Possession of Site	42.1
Possession of Site, Failure to Give	42.2
Power of Engineer to Fix Rates	52.2
Priority of Contract Documents	5.2
Programme to be Submitted	14.1
Progress – Disruption of	6.3
Progress – Rate of	46.1
Protection of Environment	19.1
Provision to Indemnify Contractor	22.3
Provision to Indemnify Employer	22.2
Provisional Sums, Currencies of Payment	72.3
Provisional Sums, Definition	58.1
Provisional Sums, Production of Vouchers	58.3
Provisional Sums, Use of	58.2
Quality of Materials and Workmanship	36.1
Quantities	55.1
Rate of Progress	46.1
Rates of Exchange	72.1
Rates, Power of Engineer to Fix	52.2
Rectification of Loss or Damage	20.2
Reduction of Liquidated Damages	47.2
Re-export of Plant	54.4
Regulations, Statutes, etc., Compliance with	26.1
Rejection	37.4
Release from Performance	66.1
Remedies for Default of Contractor	63.1
Remedying of Defects	49.2
Remedying of Defects, Cost of	49.3
Remedy on Contractor's Failure to Insure	25.3
Removal of Contractor's Employees	16.2
Removal of Contractor's Equipment	69.2
Removal of Improper Work, Materials or Plant	39.1
Removal of Plant, etc.	65.7
Responsibility to Rectify Loss or Damage	20.2
Responsibility Unaffected by Approval	7.3
Restriction on Working Hours	45.1
Resumption of Work	69.5
Retention Money, Payment of Returns of Labour and Contractor's Equipment	60.3 35.1
inclumo di Laudui anu Collitacidi 8 Eduidhicili	JJ.1

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 $\mathbf{v}$ 

Index	Clause
Revised Programme	14.2
Rights of Way and Facilities	42.3
Risks, Employer's	20.4
Risks, Special	65.
Roads, etc., - Damage by Extraordinary Traffic	30.1
Roads, Interference with Access to	29.1
Royalties	28.2
Safety, Security and Protection of the Environment	19.1
Samples, Cost of	36.2
Security, Safety and Protection of the Environment	19.1
Setting-Out	17.1
Singular and Plural	1.4
Site, Clearance on Completion	33.1
Site, Contractor to Keep Clear	32.1
Site, Inspection of by Contractor	11.1
Site Operations and Methods of Construction	8.2
Site, Possession of	42.1
Special Risks	65. 34.1
Staff, Engagement of	•
Statement at Completion	60.5 60.6
Statement, Final Statutes Pegulations etc. Compliance with	26.1
Statutes, Regulations, etc Compliance with Subcontracting	4.1
Subcontractors, Nominated	59.
Subcontractors, Responsibility of the Contractor for Acts and Default of	4.1
Subsequent Legislation	70.2
Substantial Completion of Sections or Parts	48.3
Sufficiency of Tender	12.1
Supply of Plant, Materials and Labour	8.1
Surfaces Requiring Reinstatement	48.4
Suspension, Engineer's Determination	40.2
Suspension lasting more than 84 days	40.3
Suspension of Work	40.1
Taking Over Certificate	48.1
Taking Over of Sections or Parts	48.2
Tender Documents	11.1
Tender, Sufficiency of	12.1
Termination of Contract by Employer	63.1
Termination of Contract by Employer, Assignment of Benefit	63.4
Terms of Insurance	25.1
Tests, Cost of	36.3
Tests not Provided for - Cost of	36.4
Third Party Insurance	23.1 43.1
Time for Completion Extension of	43.1 44.1
Time for Completion, Extension of Time for Payment	60,10
Traffic, Extraordinary	30.1
Traffic, Extraordinary Traffic, Interference with	29.1
Traffic, Waterborne	30.4
Transport of Contractor's Equipment and Temporary Works	30.2
Transport of Materials and Plant	30.3
Uncovering Work and Making Openings	38.2
Unfulfilled Obligations	62.2
Urgent Remedial Work	64.1

Index	Clause
Valuation at Date of Termination by the Employer	63.2
Variations	51.1
Variations, Daywork Basis	52.4
Variations, Exceeding 15 per cent	52.3
Variations, Instructions for	51.2
Variations, Power of the Engineer to Fix Rates	52.2
Variations, Valuation of	51.3
Vouchers, Production of	58.3
War, Outbreak of	20.4
Watching and Lighting, etc.	19.1
Waterborne Traffic	30.4
Work, Examination of Before Covering Up	38.1
Work, Improper, Removal of	39.1
Working Hours, Restriction of	45.1
Workmanship, Quality of	36.1
Workmen, Accident or Injury to	24.1
Works, Care of	20.1
Works, Completion of (Defects Liability Certificate)	62.1
Works, Commencement of	41.1
Works, Insurance of	21.1
Works, Remedying of Defects	49.2
Works, Time for Completion of	43.1
Works to be Measured	56.1
Work, Suspension of	40.1
Work to be in Accordance with the Contract	13.1

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### **TENDER**

TO:*		
Gentlemen,		
Quantities and Addenda Nowe, the undersigned, offer to	ditions of Contract, Specification, Dractos for the execution of the abox execute and complete such Works and the Conditions of Contract, Specification for the sum of	ove-named Works remedy any defect
(		
or such other sum as may b	be ascertained in accordance with the s	said Conditions.
•	Appendix forms part of our Tender.	
reasonably possible after t	der is accepted, to commence the W he receipt of the Engineer's notice to Works comprised in the Contract withi	commence, and t
ine rippendia to render.		
We agree to abide by this T receiving the same and it sh	render for the period of * days fro all remain binding upon us and may be a at period.	
We agree to abide by this T receiving the same and it sh before the expiration of the Unless and until a formal A	all remain binding upon us and may be a	iccepted at any tim
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We agree to abide by this T receiving the same and it she before the expiration of the Unless and until a formal with your written acceptant. We understand that you arreceive.  Dated this	all remain binding upon us and may be and period.  Agreement is prepared and executed the ce thereof, shall constitute a binding core not bound to accept the lowest or a day of in the capacity of ders for and on behalf of	nis Tender, togeth ontract between uny tender you may

#### **Appendix**

#### Sub-Clause

`	Sub-Claus	e
Amount of security (if any)	_ 10.1	per cent of the Contract Price
Minimum amount of third party insurance	23.2	per occurrence, with the number of occurrences unlimited
Time for issue of notice to commence	41.1	days
Time for Completion	_ 43.1	days
Amount of liquidated damages	_ 47.1	per day
Limit of liquidated damages	_ 47.1	
Defects Liability Period	_ 49.1	days
Percentage for adjustment of Provisional Sums	59.4(c)	per cent
Percentage of invoice value of listed materials and Plant	_60.1 (c)	per cent
Percentage of Retention	_ 60.2	per cent
Limit of Retention Money	_ 60.2	
Minimum Amount of Interim Payment Certificates	_ 60.2	
Rate of interest upon unpaid sums	_60.10	per cent per annum
Initials of Signatory of Tender		
(Notes: All details in the list above, other than pershall be inserted before issue of Tender docur	nents. Wh	here a number of days is to be

inserted, it is desirable, for consistency with the Conditions, that the number should be a multiple of seven.

Additional entries are necessary where provision is included in the Contract for:

- (a) completion of Sections (Sub-Clauses 43.1 and 48.2(a))
- (b) liquidated damages for Sections (Sub-Clause 47.1)
- (c) a bonus (Sub-Clause 47.3 Part II)
- (d) payment for materials on Site (Sub-Clause 60.1(c))
- (e) payment in foreign currencies (Clause 60 Part II)
- (f) an advance payment (Clause 60 Part II)
- (g) adjustments to the Contract Price on account of Specified Materials (Sub-Clause 70.1 – Part II)
- (h) rates of exchange (Sub-Clause 72.2 Part II))

### **Agreement**

1.

2.

3.

4.

This Agreement made the	day of	19
Between		
of		
(hereinaf	ter called "the Employ	er") of the one part and
		•
(hereinafter called "the Contractor") o	ot f the other part	
Whereas the Employer is desirous the	nat certain Works sho	uld be executed by the
Contractor, viz		
and has accepted a Tender by the Conti	actor for the execution	and completion of such
Works and the remedying of any defe	cts therein	-
Now this Agreement witnesseth as for	ollows:	
In this Agreement words and expres respectively assigned to them in the C		
The following documents shall be dee of this Agreement, viz:	med to form and be rea	ad and construed as part
(a) The Letter of Acceptance;		
(b) The said Tender;		
(c) The Conditions of Contract (Parts	I and II);	
(d) The Specification;		
(e) The Drawings; and		
(f) The Bill of Quantities.		
In consideration of the payments to be hereinafter mentioned the Contractor I and complete the Works and remedy a with the provisions of the Contract.	nereby covenants with	the Employer to execute
The Employer hereby covenants to execution and completion of the wo Contract Price or such other sum as m Contract at the times and in the mann	rks and the remedying ay become payable un-	g of defects therein the der the provisions of the
In Witness whereof the parties hereto day and year first before written in ac		
The Common Seal of		
was hereunto affixed in the presence	of:-	
	or	
Signed Sealed and Delivered by the		
said		
in the presence of:		

#### **EDITORIAL AMENDMENTS IN 1988**

Following publication of the Fourth Edition in 1987 of the Conditions of Contract for Works of Civil Engineering Construction, a number of editorial amendments were agreed by FIDIC. The amendments were incorporated during a 1988 reprinting and the list below clarifies the differences between the 1988 reprint and the original document.

#### **Foreword**

The last sentence of the first paragraph previously read "The Conditions are equally suitable for use on domestic contracts."

Page

6 Sub-Clause 10.1. A comma has been inserted after the word "Contract" in the second line.

The third sentence previously read "Such security shall be in such form as may be agreed between the Employer and the Contractor."

**Page** 

Sub-Clause 22.1 (b) was previously one complete paragraph, ie there was no space between the words "... other than the Works), " and the remainder of the Sub-Clause.

**Page** 

5 Sub-Clause 31.2 (c) was previously one complete paragraph, ie there was no space between the words "... nature for any such," and the remainder of the Sub-Clause.

**Page** 

Sub-Clause 44.3. The penultimate sentence was previously, "In both such cases the Engineer shall notify the Contractor accordingly, with a copy to the Employer."

Page

21 Sub-Clause 49.1 (a). The word "substantial" has been deleted.

**Page** 

29

Sub-Clause 60.3 (b) was previously two paragraphs, the second beginning with the words "Provided also that if at such time . . ."

Page

30 Sub-Clause 60.5. The word "The" has been inserted at the beginning of the final paragraph.

**Page** 

Sub-Clause 67.1. In the eighth line of the third paragraph, a comma has been inserted after the word "provided". In the second line of the fourth paragraph, the word "notice" replaces the word "notification".

Page

Reference to Part II. In the third line, the words "and (iv)" have been inserted after paragraph (a) (i).

#### **Tender**

Item

**3.** The word "Works" has been capitalised.

#### Agreement

Line

4 Inverted commas have been inserted following the words "the Employer."

Line

Inverted commas have been inserted before the word "the" instead of before the word "Contractor."

Line

8 The word "Contractor" has been capitalised.

Line

**9** The words "Tender by the Contractor" were previously "Tender by Contractor."

Line

11 The word "Agreement" has been capitalised.

Last lines

The Agreement previously ended with the words "Binding Signature of Employer" and "Binding Signature of Contractor".

#### **FURTHER AMENDMENTS IN 1992**

The following amendments have been made to the 1988 Reprint of the Fourth Edition of the Conditions of Contract for Works of Civil Engineering Construction. The amendments of the 1988 Reprint are shown on the previous page. In addition, some minor changes in the use of punctuation marks (commas, semicolons, colons and stops), as well as the use of the words "or" and "and" have been introduced to attain uniformity in the style of all Clauses. These minor changes which improve the style, but which have no effect on the meaning of Clauses, have not been listed below.

#### **FOREWORD**

**Page** 

29

The eighth paragraph previously referred to the anticipated publication of the "Guide to the Use of FIDIC Conditions of Contract for Works of Civil Engineering Construction".

- **Page** 2 Sub-Clause 1.1, sub-para (e). Definitions (iii) "Interim Payment Certificate" and (iv) "Final Payment Certificate" have been added.
- Sub-Clause 8.1. Second paragraph has been added. **Page** 6
- Sub-Clause 12.2. Marginal note. The word "Adverse" has been changed to read "Not Page 7 Foreseeable" (also amended in the Contents and the Index).
- **Page** 8 Sub-Clause 13.1. Last sentence has been shortened by deleting the words "or, subject to the provisions of Clause 2, from the Engineer's Representative.", and adding the words "(or his delegate).".

Sub-Clause 15.1, para 1. Last sentence has been shortened by placing a full stop after the word "Engineer", deleting the words " or subject to the provisions of Clause 2, the Engineer's Representative."

- Sub-Clause 21.1, sub-para (a). The words "(the term "cost" in this context shall include **Page** 10 profit)" have been added.
- 11 Sub-Clause 21.4, sub-para (a). The word "where" has been corrected to read "whether". **Page**
- Sub-Clause 40.3. The word "written" has been deleted at the end of the first line. Page 18
- Sub-Clause 42.3. The word "wayleaves" has been changed to read "rights of way" in Page 19 the text and marginal note (also amended in the Contents and the Index).
- Sub-Clause 60.1, sub-para (e). The words "or otherwise" have been added at the end Sub-Clause 60.2. The words "certify to the Employer" have been changed to read "deliver to the Employer an Interim Payment Certificate stating", the word "thereof" has been changed to read "of such statement" and the word "he" has been changed to read "the Engineer". Sub-para (b). The words "Interim Certificates" have been

changed to read "Interim Payment Certificates".

Sub-Clause 60.3, sub-para (b). In the eighth line, the word "ordered" has been changed to read "instructed".

Sub-Clause 60.4. The words "interim certificate" in the first and fourth lines, and the word "certificate" in the second line, have been changed to read "Interim Payment Certificate".

Sub-Clause 60.5. In the second line, after the word "Engineer", the words "six copies **Page** 30 of' have been added.

> Sub-Clause 60.6. In the second line, after the word "consideration", the words "six copies of" have been added. Sub-para (b). The words "or otherwise" have been added at the end. At the end of the sub-clause, the final paragraph has been added.

> Sub-Clause 60.7 and Sub-Clause 60.8 (text and marginal note). The words "Final Certificate" have been changed to read "Final Payment Certificate" (also amended in the Contents and the Index).

> Sub-Clause 60.8 (a). The words "or otherwise" have been added. Sub-Clause 60.8 (b). The words "under the Contract other than Clause 47" have been changed to read "other than under Clause 47".

> Sub-Clause 60.10. In the first and fourth lines, the words "interim certificate" have

Page been changed to read "Interim Payment Certificate". In the fifth and sixth lines, the words "Final Certificate" have been changed to read "Final Payment Certificate". The words "or otherwise" have been added at the end. **Page** 33 Sub-Clause 65.6. In the ninth line, the words "and to the operation of Clause 67" have been changed to read "and Clause 67". **Page** 34 Sub-Clause 66.1. In the second line the word "party" has been changed to read "or both parties", in the third line between the words "his" and "contractual" the words "or their" have been added. In the fourth line after the word "then", the words "the parties shall be discharged from the Contract, except as to their rights under this Clause and Clause 67 and without prejudice to the rights of either party in respect of any antecedent breach of the Contract, and "have been added. **Page** 35 Sub-Clause 67.2. The words "arbitration of such dispute shall not be commenced unless an attempt has first been made by the parties to settle such dispute amicably" have been changed to read "the parties shall attempt to settle such dispute amicably before the commencement of arbitration." The words "whether or not any attempt at amicable settlement thereof has been made" have been changed to read "even if no attempt at amicable settlement thereof has been made". **Page** 37 Sub-Clause 69.1, Sub-para (d). The words "unforseen reasons, due to economic dislocation" have been changed to read "unforseen economic reasons". Sub-Clause 69.4. In the second line of the second paragraph, the word "cost" has been changed to read "costs". Page 38 REFERENCE TO PART II. In the third line, the words "5.1 part" have been changed to read "5.1 (part)". **TENDER** Paragraph 1. In the last line, the word "sums" has been changed to read "sum". **Appendix** In the ninth line, the words "and Plant" have been added. In the twelth line, the word "Payment" has been added.

In the thirteenth line, the words "per annum" have been added.

**EDITORIAL AMENDMENTS** 

For page 35, after the words "Sub-Clause 67.1" the first sentence has been inserted.

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#### FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS

### **CONDITIONS OF CONTRACT**

FOR WORKS OF CIVIL

### ENGINEERING CONSTRUCTION

PART II CONDITIONS OF PARTICULAR APPLICATION WITH GUIDELINES FOR PREPARATION OF PART II CLAUSES

FOURTH EDITION 1987 Reprinted 1988 with editorial amendments Reprinted 1992 with further amendments

#### **CONTENTS**

# PART II: CONDITIONS OF PARTICULAR APPLICATION

		Page
	Introduction (including special reference to Dredging and Reclamation Work)	1
1 2	Definitions Engineer's Duties	3 3
5	Language/s and Law and Documents	3
9	Contract Agreement	4
10	Performance Security	4
11	Inspection of Site	5
12	Not Foreseeable Physical Obstructions or Conditions	5
14	Programme and Cash Flow Estimate	5
15	Contractor's Superintendence	9
16	Contractor's Employees	9
18	Boreholes and Exploratory Excavation	9
19	Safety, Security and Protection of the Environment	9
21	Insurance of Works and Contractor's Equipment	10
21, 23		
& 25	Insurances Arranged by Employer	10
28	Royalties	11
31	Opportunities for Other Contractors	12
34	Labour	12
35	Records and Reports	14
40	Suspension	14
43	Time for Completion	14
45	Restriction on Working Hours	14
47	Bonuses	15
48	Prevention from Testing	15
49	Defects Liability	16
50	Contractor to Search	16
51	Variations	16
52	Payment in Foreign Currency	17
54	Vesting of Contractor's Equipment	17
60	Certificates and Payments	18
67	Settlement of Disputes	19
68		20
69	Default of Employer	20
70	e	20
72	y 1	24
73		25
	INDEX	
	EDITORIAL AMENDMENTS IN 1988	
	FURTHER AMENDMENTS IN 1992	

#### INTRODUCTION

The terms of the Fourth Edition of the Conditions of Contract for Works of Civil Engineering Construction have been prepared by the Fédération Internationale des Ingénieurs Conseils (FIDIC) and are recommended for general use for the purpose of construction of such works where tenders are invited on an international basis. The Conditions, subject to minor modifications, are also suitable for use on domestic contracts.

The version in English of the Conditions is considered by FIDIC as the official and authentic text for the purpose of translation.

The Clauses of general application have been grouped together in a separately bound document and are referred to as Part I—General Conditions. They have been printed in a form which will facilitate their inclusion, as printed, in the contract documents normally prepared.

In the preparation of the Conditions it was recognised that while there are numerous Clauses which will be generally applicable there are some Clauses which must necessarily vary to take account of the circumstances and locality of the Works.

Part I — General Conditions and Part II — Conditions of Particular Application together comprise the Conditions governing the rights and obligations of the parties.

For this reason a Part II standard form has not been produced. It will be necessary to prepare a Part II document for each individual contract and the Guidelines are intended to aid in this task by giving options for various clauses where appropriate.

Part II clauses may arise for one or more reasons, of which the following are examples:

- (i) Where the wording in Part I specifically requires that further information is to be included in Part II and the Conditions would not be complete without that information, namely in Sub-Clauses 1.1 paragraphs (a) (i) and (iv), 5.1 (part), 14.1, 14.3, 68.2 and 70.1
- (ii) Where the wording in Part I indicates that supplementary information may be included in Part II, but the conditions would still be complete without any such information, namely in Sub-Clauses 2.1 paragraph (b), 5.1 (part), 21.1 paragraph (b) and 72.2.
- (iii) Where the type, circumstances or locality of the Works necessitates additional Clauses or Sub-Clauses.
- (iv) Where the law of the country or exceptional circumstances necessitate an alteration in Part I. Such alterations should be effected by stating in Part II that a particular Clause, or part of a Clause, in Part I is deleted and giving the substitute Clause, or part, as applicable.

As far as possible, in the Clauses that are mentioned hereunder, example wording is provided. In the case of some Clauses, however, only an aide-memoire for the preparation is given. Before incorporating any example wording it must be checked to ensure that it is wholly suitable for the particular circumstances and, if not, it must be varied. Where example wording is varied and in all cases where additional material is included in Part II, care must be taken that no ambiguity is created with Part I or between the Clauses in Part II.

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1

#### Dredging and Reclamation Work

Special consideration must be given to Part II where dredging and certain types of reclamation work are involved. Dredgers are considerably more expensive than most items of Contractor's Equipment and the capital value of a dredger can often exceed the value of the Contract on which it is used.

For this reason, it is in the interests of both the Employer and the Contractor that a dredger is operated intensively in the most economic fashion, subject to the quality of work and any other over-riding factors. With this end in view, it is customary to allow the Contractor to execute dredging work continuously by day and by night seven days a week. Another difference from most civil engineering is that on dredging work the Contractor is not normally held responsible for the remedying of defects after the date of completion as certified under Clause 48. Part II contains explanations and example wording to cover the above points and others relating to dredging. Clauses 11, 12, 18, 19, 28, 40, 45, 49, 50 and 51 are those which most often require attention in Part II when dredging work is involved and reference is included under each of these Clauses. Other Clauses may also need additions in Part II in certain circumstances. Reclamation work varies greatly in character and each instance must be considered before deciding whether it is appropriate to introduce in Part II changes similar to those adopted for dredging, or to use the standard civil engineering form unaltered.

#### PART II CONDITIONS OF PARTICULAR APPLICATION

#### Clause 1

#### **Sub-Clause 1.1 – Definitions**

- (a) (i) The Employer is (insert name)
- (a) (iv) The Engineer is (insert name)

If further definitions are essential, additions should be made to the list.

#### Clause 2

#### Sub-Clause 2.1 – Engineer's Duties

#### **EXAMPLE**

The Engineer shall obtain the specific approval of the Employer before carrying out his duties in accordance with the following Clauses of Part 1:

- (a) Clause (insert applicable number)
- (b) Clause (insert applicable number)
- (c) Clause (insert applicable number)

This list should be extended or reduced as necessary.

In some cases the obligation to obtain the approval of the Employer may apply to only one Sub-Clause out of several in a Clause or approval may only be necessary beyond certain limits, monetary or otherwise. Where this is so, the example wording must be varied.

If the obligation to obtain the approval of the Employer could lead to the Engineer being unable to take action in an emergency, where matters of safety are involved, an additional paragraph may be necessary.

#### **EXAMPLE**

Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 52 and shall notify the Contractor accordingly, with a copy to the Employer.

#### Clause 5

#### Sub-Clause 5.1 – Language/s and Law

- (a) The language is (insert as applicable)
- (b) The law is that in force in (insert name of country)

If necessary (a) above should be varied to read:

The languages are (insert as applicable)

and there should be added

The Ruling Language is (insert as applicable)

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#### **Sub-Clause 5.2 – Priority of Contract Documents**

Where it is decided that an order of precedence of all documents should be included, this Sub-Clause may be varied as follows:

#### **EXAMPLE**

Delete the documents listed 1 - 6 and substitute:

- (1) the Contract Agreement (if completed);
- (2) the Letter of Acceptance;
- (3) the Tender;
- (4) the Conditions of Contract Part II;
- (5) the Conditions of Contract Part I;
- (6) the Specification;
- (7) the Drawings; and
- (8) the priced Bill of Quantities

or

Where it is decided that no order of precedence of documents should be included, this Sub-Clause may be varied as follows:

#### **EXAMPLE**

Delete the text of the Sub-Clause and substitute:

The several documents forming the Contract are to be taken as mutually explanatory of one another, but in the case of ambiguities or discrepancies the priority shall be that accorded by law. If, in the opinion of the Engineer, such ambiguities or discrepancies make it necessary to issue any instruction to the Contractor in explanation or adjustment, the Engineer shall have authority to issue such instruction.

#### Clause 9

Where it is decided that a Contract Agreement should be entered into and executed the form must be annexed to these Conditions as stated in Sub-Clause 9.1 of Part I of these Conditions.

A suitable form is annexed to Part I – General Conditions.

#### Clause 10

#### Sub-Clause 10.1 – Performance Security

Where it is decided that a performance security should be obtained by the Contractor, the form must be annexed to these Conditions as stated in Sub-Clause 10.1 of Part I of these Conditions.

Two example forms of performance security are given on pages 7, 8 and 9. The Clause and wording of the example forms may have to be varied to comply with the law of the Contract which may require the forms to be executed under seal.

Where there is provision in the Contract for payments to the Contractor to be made in foreign currency, Sub-Clause 10.1 of Part I of these Conditions may be varied.

#### **EXAMPLE**

After the first sentence, insert the following sentence:

The security shall be denominated in the types and proportions of currencies stated in the Appendix to Tender.

Where the source of the performance security is to be restricted, an additional Sub-Clause may be added.

#### **EXAMPLE SUB-CLAUSES**

# Source of 10.4 Performance Security

The performance security, submitted by the Contractor in accordance with Sub-Clause 10.1, shall be furnished by an institution registered in (insert the country where the Works are to be executed) or licensed to do business in such country.

or

# Source of 10.4 Performance Security

Where the performance security is in the form of a bank guarantee, it shall be issued by:

(a) a bank located in the country of the Employer, or

(b) a foreign bank through a correspondent bank located in the country of the Employer.

#### Clause 11

Where the bulk or complexity of the data, or reasons of security enforced by the country where the Works are to be executed, makes it impracticable for the Employer to make all data available with the Tender Documents and inspection of some data by the Contractor at an office is therefore expected, it would be advisable to make the circumstances clear.

#### **EXAMPLE SUB-CLAUSE**

### Access 11.2 to Data

Data made available by the Employer in accordance with Sub-Clause 11.1 shall be deemed to include data listed elsewhere in the Contract as open for inspection at (insert particulars of the office or offices where such data is stored)

#### **Sub-Clause 11.1 – Inspection of Site**

For a Contract comprising dredging and reclamation work the Clause may be varied as follows:

#### **EXAMPLE**

In the first paragraph, delete the words "hydrological and sub-surface" and substitute "hydrographic and sub-seabed".

In the second paragraph, under (a) delete the word "sub-surface" and substitute "sub-seabed" and under (b) delete the word "hydrological" and substitute "hydrographic".

#### Clause 12

#### **Sub-Clause 12.2 – Not Foreseeable Obstructions or Conditions**

For a Contract comprising dredging and some types of reclamation work the Sub-Clause may require to be varied.

#### EXAMPLE

Delete the words ", other than climatic conditions on the Site,".

#### Clause 14

#### **Sub-Clause 14.1 – Programme to be Submitted**

The time within which the programme shall be submitted shall be (insert number) days.

#### Sub-Clause 14.3 - Cash Flow Estimate to be Submitted

The time within which the detailed cash flow estimate shall be submitted shall be (insert number) days.

In both examples given above it is desirable for consistency with the rest of the Conditions that the number of days inserted should be a multiple of seven.

5

#### EXAMPLE PERFORMANCE GUARANTEE

By this guarantee We,	
whose registered office is at _	
	ractor") and
whose registered office is at _	
(hereinafter called "the Guar	cantor") are held and firmly bound unto
	(hereinafter called "the Employer"
in the sum of	for the payment of which sun
the Contractor and the Gua jointly and severally by these	rantor bind themselves, their successors and assign presents.
part and the Contractor of the called "the said Contract")	an Agreement made between the Employer of the on the other part has entered into a Contract (hereinafte to execute and complete certain Works and remed in mentioned in conformity with the provisions of th
shall duly perform and o stipulations of the said Con observed according to the default by the Contractor the sustained by the Employer Guarantee then this obligation remain in full force and effect the extent or nature of the Veremedied thereunder and no under the said Contract nor a matter or thing concerning the said Engineer shall in any we above-written Guarantee.	bove-written Guarantee is such that if the Contractor bserve all the terms provisions conditions and tract on the Contractor's part to be performed and true purport intent and meaning thereof or if one Guarantor shall satisfy and discharge the damage thereby up to the amount of the above-writter on shall be null and void but otherwise shall be and to but no alteration in terms of the said Contract or it works to be executed, completed and defects thereif allowance of time by the Employer or the Engineer any forbearance or forgiveness in or in respect of another said Contract on the part of the Employer or the Apy release the Guarantor from any liability under the Provided always that the above obligation of the charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages sustained by the Employer shall be a charge the damages.
	both the Employer and the Contractor that the have mutually agreed that the amount of damage imployer or
arbitration proceeding carr	ntor of a legally certified copy of an award issued in ried out in conformity with the terms of the said the damages is payable to the Employer.
Signed on	Signed on
on behalf of	on behalf of
by	by
in the capacity of	in the capacity of
in the presence of	in the presence of

#### **EXAMPLE SURETY BOND FOR PERFORMANCE**

Know all Men by these Presents that (name and address of Contractor)

as Principal (hereinafter called address of Surety)	,	e, legal title and
as Surety (hereinafter called " (name and address of Employer)	•	-
"the Employer") in the amount and truly to be made, the Con successors and assigns, jointly an	ntractor and the Surety bind i	which sum, well themselves, their
Whereas the Contractor has ent	ered into a written contract ag	reement with the
Employer dated the	day of	19
for(name of Works) in accordance with the plans an extent herein provided for, are b referred to as the Contract.	nd specifications and amendmen	

Now, therefore, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto) then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Whenever Contractor shall be, and declared by Employer to be, in default under the Contract, the Employer having performed the Employer's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) Complete the Contract in accordance with its terms and conditions; or
- (2) Obtain a bid or bids for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by Employer and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Value; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the Contract Value", as used in this paragraph, shall mean the total amount payable by Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or
- (3) Pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions any amount up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the issue of the Defects Liability Certificate.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators or successors of the Employer.

Signed on	Signed on
on behalf of	on behalf of
by	by
in the capacity of	in the capacity of
in the presence of	in the presence of

#### Clause 15

Where the language in which the Contract documents have been drawn up is not the language of the country in which the Works are to be executed, or where for any other reason it is necessary to stipulate that the Contractor's authorised representative shall be fluent in a particular language, an additional Sub-Clause may be added.

#### **EXAMPLE SUB-CLAUSES**

# Language Ability 15.2 of Contractor's Representative

The Contractor's authorised representative shall be fluent in (insert name of language).

or

### Interpreter to be 15.2 Made Available

If the Contractor's authorised representative is not, in the opinion of the Engineer, fluent in (insert name of language), the Contractor shall have available on Site at all times a competent interpreter to ensure the proper transmission of instructions and information.

#### Clause 16

Where the language in which the Contract documents have been drawn up is not the language of the country in which the Works are to be executed, or where for any other reason it is necessary to stipulate that members of the Contractor's superintending staff shall be fluent in a particular language, an additional Sub-Clause may be added.

#### **EXAMPLE SUB-CLAUSE**

# Language Ability 16.3 of Superintending Staff

A reasonable proportion of the Contractor's superintending staff shall have a working knowledge of (insert name of language) or the Contractor shall have available on Site at all times a sufficient number of competent interpreters to ensure the proper transmission of instructions and information.

Where there is a desire, but not a legal requirement, that the Contractor makes reasonable use of materials from or persons resident in the country in which the Works are to be executed, an additional Sub-Clause may be added.

#### **EXAMPLE SUB-CLAUSE**

#### Employment of 16.4 Local Personnel

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour from sources within (insert name of country).

#### Clause 18

#### **Sub-Clause 18.1 – Boreholes and Exploratory Excavation**

For a Contract comprising dredging and reclamation work the Sub-Clause may require to be varied.

#### **EXAMPLE**

Add second sentence as follows:

Such exploratory excavation shall be deemed to include dredging.

#### Clause 19

#### Sub-Clause 19.1 – Safety, Security and Protection of the Environment

Where a Contract includes dredging the possibility of pollution should be given particular attention and additional wording may be required. For example, where fishing and recreation areas might be influenced, the Contractor should be required to plan and execute the dredging so that the effect is kept to a minimum. Where there is a risk of chemical pollution from soluble sediments in the dredging area, for instance in a harbour, it is important that sufficient information is provided with the Tender documents. Responsibilities should be clearly defined.

9

## Sub-Clause 21.1 - Insurance of Works and Contractor's Equipment

Where there is provision in the Contract for payments to the Contractor to be made in foreign currency, this Sub-Clause may be varied.

#### **EXAMPLE**

Add final sentence as follows:

The insurance in paragraphs (a) and (b) shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

Where it is decided to state the deductible limits for the Employer's Risks, this Sub-Clause may be varied.

#### **EXAMPLE**

Add to paragraph (a) as follows:

and with deductible limits for the Employer's Risks not exceeding (insert amounts)

## Clauses 21, 23 and 25. Insurances Arranged by Employer

In certain circumstances, such as where a number of separate contractors are employed on a single project, or phased take-over is involved, it may be preferable for the Employer to arrange insurance of the Works, and Third Party insurance. In such case, it must be clear in the Contract that the Contractor is not precluded from taking out any additional insurance, should he desire to do so, over and above that to be arranged by the Employer.

Tenderers must be provided at the Tender stage with details of the insurance to be arranged by the Employer, in order to assess what provision to make in their rates and prices for any additional insurance, and for the amount of policy deductibles which they will be required to bear. Such details shall form part of the Contract between the Employer and the Contractor.

Example wording to allow for the arrangement of insurance by the Employer is as follows:

### **EXAMPLE**

## Clause 21

Delete the text of the Clause and substitute the following re-numbered Sub-Clauses:

## Insurance 21.1 of Works

Without limiting his or the Contractor's obligations and responsibilities under Clause 20, the Employer will insure:

- (a) the Works, together with materials and Plant for incorporation therein, to the full replacement cost (the term "cost" in this context shall include profit), and
- (b) an additional sum to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature.

## Insurance of 21.2 Contractor's Equipment

The Contractor shall, without limiting his obligations and responsibilities under Clause 20, insure the Contractor's Equipment and other things brought onto the site by the Contractor, for a sum sufficient to provide for their replacement at the Site.

Scope of Cover 21.3

The insurance in Sub-Clause 21.1 shall be in the joint names of the Contractor and the Employer and shall cover:

- (a) the Employer and the Contractor against loss or damage as provided in the details of insurance annexed to these Conditions, from the start of work at the Site until the date of issue of the relevant Taking-Over Certificate in respect of the Works or any Section or part thereof as the case may be, and
- (b) the Contractor for his liability:
  - (i) during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period, or
  - (ii) 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.

# Responsibility for 21.4 Amounts not Recovered

Any amounts not insured or not recovered from the insurers shall be borne by the Employer or the Contractor in accordance with their responsibilities under Clause 20.

## Clause 23

Delete the text of the Clause and substitute:

Third Party 23.1 Insurance (including Employer's Property) Without limiting his or the Contractor's obligations and responsibilities under Clause 22, the Employer will insure in the joint names of the Contractor and the Employer, against liabilities for death of or injury to any person (other than as provided in Clause 24) or loss of or damage to any property other than the Works) arising out of the performance of the Contract, as provided in the details of insurance referred to in Sub-Clause 21.3.

#### Clause 25

Delete the text of the Clause and substitute:

Evidence 25.1 and Terms of Insurances The insurance policies to be arranged by the Employer pursuant to Clauses 21 and 23 shall be consistent with the general terms described in the Tender and copies of such policies shall when required be supplied by the Employer to the Contractor.

Adequacy of 25.2 Insurances

The Employer shall notify the insurers of changes in the nature, extent or programme for execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of the Contract and shall, when required, produce to the Contractor the insurance policies in force and the receipts for payment of the premiums. No variations shall be made to the insurances by the Employer without the prior approval of the Contractor.

Remedy on 25.3 Employer's Failure to Insure If and so far as the Employer fails to effect and keep in force any of the insurances referred to in Sub-Clause 25.1, then the Contractor may effect and keep in force any such insurance and pay any premium as may be necessary for that purpose and add the amount so paid to any monies due or to become due to the Contractor, or recover the same as a debt due from the Employer.

Compliance with 25.4 Policy Conditions

In the event that the Contractor or the Employer fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, each shall indemnify the other against all losses and claims arising from such failure.

### Clause 28

## **Sub-Clause 28.2 – Royalties**

For a Contract comprising dredging and reclamation work and for any other Contract involving the dumping of materials the Sub-Clause may require to be varied.

## **EXAMPLE**

Add second sentence as follows:

The Contractor shall also be liable for all payments or compensation, if any, levied in relation to the dumping of part or all of any such materials.

It is sometimes the case on dredging contracts for the Employer to bear the costs of tonnage and other royalties, rent and other payments or compensation. If such conditions are to apply, Sub-Clause 28.2 should be varied either by adding wording or by deleting the existing wording and substituting new wording.

## Clause 31

Where the particular requirements of other contractors are known within reasonable limits at the time of preparation of the Contract documents, details must be stated. The Specification is usually the appropriate place to do so but, exceptionally, some reference may be desirable in the Conditions. In that case, an additional Sub-Clause or Sub-Clauses could be added to this Clause.

## Clause 34

It will generally be necessary to add a number of Sub-Clauses, to take account of the circumstances and locality of the Works, covering such matters as: permits and registration of expatriate employees; repatriation to place of recruitment; provision of temporary housing for employees; requirements in respect of accommodation for staff of Employer and Engineer; standards of accommodation to be provided; provision of access roads, hospital, school, power, water, drainage, fire services, refuse collection, communal buildings, shops, telephones; hours and conditions of working; rates of pay; compliance with labour legislation; maintenance of records of safety and health.

## EXAMPLE SUB-CLAUSES ( to be numbered, as appropriate)

## Rates of Wages and Conditions of Labour

34. The Contractor shall pay rates of wages and observe conditions of labour not less favourable than those established for the trade or industry where the work is carried out. In the absence of any rates of wages or conditions of labour so established, the Contractor shall pay rates of wages and observe conditions of labour which are not less favourable than the general level of wages and conditions observed by other employers whose general circumstances in the trade or industry in which the Contractor is engaged are similar.

## Employment of Persons in the Service of Others

34. The Contractor shall not recruit or attempt to recruit his staff and labour from amongst persons in the service of the Employer or the Engineer.

## Repatriation of Labour

34.

The Contractor shall be responsible for the return to the place where they were recruited or to their domicile of all such persons as 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 (insert name of country), shall have left (insert name of country).

### Housing for Labour 34.

Save insofar as the Contract otherwise provides, 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, air conditioning, cookers, refrigerators, furniture and other requirements in connection with such accommodation or amenities. On completion of the 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.

## Accident Prevention 34. Officer; Accidents

The Contractor shall have on his staff at the Site an officer dealing only with questions regarding the safety and protection against accidents of all staff and labour. This officer shall be qualified for this work and shall have the authority to issue instructions and shall take protective measures to prevent accidents.

### Health and Safety

34.

34.

34.

Due precautions shall be taken by the Contractor, and at his own cost, to ensure the safety of his staff and labour and, in collaboration with and to the requirements of the local health authorities, to ensure that medical staff first aid equipment and stores, sick bay and suitable ambulance service are available at the camps, housing and on the Site at all times throughout the period of the Contract and that suitable arrangements are made for the prevention of epidemics and for all necessary welfare and hygiene requirements.

## Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect all staff and labour employed on the site from insect nuisance, rats 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. The Contractor shall warn his staff and labour of the dangers of bilharzia and wild animals.

## **Epidemics**

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

#### Burial of the Dead

**34.** The Contractor shall make all necessary arrangements for the transport, to any place as required for burial, of any of his expatriate employees or members of their families who may die in (insert name of country). The Contractor shall also be responsible, to the extent required by the local regulations, for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the Works.

## Supply of Foodstuffs

**34.** The Contractor shall arrange for the provision of a sufficient supply of suitable food at reasonable prices for all his staff, labour and Subcontractors, for the purposes of or in connection with the Contract.

### Supply of Water

**34.** 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.

## Alcoholic Liquor or Drugs

**34.** The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulations or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his Subcontractors, agents, staff or labour.

## Arms and Ammunition

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

### Disorderly Conduct 34.

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 and property in the neighbourhood of the Works against the same.

© FIDIC 1987 13

Additional Sub-Clauses may be desirable to cover circumstances which require the maintenance of particular records or the provision of certain specific reports.

## EXAMPLE SUB-CLAUSES (to be numbered, as appropriate)

## Records of Safety and Health

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

## Reporting of Accidents

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

## Clause 40

35.

For a Contract comprising dredging and some types of reclamation work the Clause may be varied.

## **Sub-Clause 40.1 – Suspension of Work**

#### **EXAMPLE**

Delete paragraph (c) and renumber paragraph (d) as (c).

## Sub-Clause 40.3 – Suspension Lasting more than 84 Days

#### **EXAMPLE**

In the first sentence delete the words ", (c) or (d)" and substitute "or (c)".

## Clause 43

## **Sub-Clause 43.1 – Time for Completion**

Where completion is stated to be by a date and not within a period of time, the Sub-Clause will require to be varied.

#### **EXAMPLE**

Delete the words, "within the time... such extended time" and substitute "by the date or dates stated in the Appendix to Tender for the whole of the Works or the Section (as the case may be) or such later date or dates".

### Clause 45

For a Contract located in an isolated area, where environmental restrictions do not apply, or where a Contract comprises work, such as dredging and reclamation, that may require continuous working, the Clause may be varied.

### **EXAMPLE**

Delete Sub-Clause 45.1 and substitute:

## Working Hours 45.1

Subject to any provision to the contrary contained in the Contract, the Contractor shall have the option to work continuously by day and by night and on locally recognised days of rest.

The Contractor's option may be further extended by substituting, in place of the last three words:

holidays or days of rest.

Where it is desired to make provision for the payment of a bonus or bonuses for early completion, an additional Sub-Clause may be added.

In the case where a bonus is provided for early completion of the whole of the Works:

#### **EXAMPLE SUB-CLAUSE**

## Bonus for 47.3 Completion

If the Contractor achieves completion of the Works prior to the time prescribed by Clause 43, the Employer shall pay to the Contractor a sum of (insert figure) for every day which shall elapse between the date stated in the Taking-Over Certificate in respect of the Works issued in accordance with Clause 48 and the time prescribed in Clause 43.

or

In the case where bonuses are provided for early completion of Sections of the Works and details, other than the dates, are given in the Specification:

### **EXAMPLE SUB-CLAUSE**

## Bonus for 47.3 Completion

Sections are required to be completed by the dates given in the Appendix to Tender in order that such Sections may be occupied and used by the Employer in advance of the completion of the whole of the Works.

Details of the work required to be executed to entitle the Contractor to bonus payments and the amount of the bonuses are stated in the Specification.

For the purposes of calculating bonus payments, the dates given in the Appendix to Tender for completion of Sections are fixed and, unless otherwise agreed, no adjustments of the dates by reason of granting an extension of time pursuant to Clause 44 or any other Clause of these Conditions will be allowed.

Issue of certificates by the Engineer that the Sections were satisfactory and complete by the dates given on the certificates shall, subject to Clause 60, entitle the Contractor to the bonus payments calculated in accordance with the Specification.

#### Clause 48

Where it can be foreseen that, when the whole of the Works have been substantially completed, the Contractor may be prevented by reasons beyond his control from carrying out the Tests on Completion, an additional Sub-Clause may be added.

## **EXAMPLE SUB-CLAUSE**

## Prevention 48.5 from Testing

If the Contractor is prevented from carrying out the Tests on Completion by a cause for which the Employer or the Engineer or other contractors employed by the Employer are responsible, the Employer shall be deemed to have taken over the Works on the date when the Tests on Completion would have been completed but for such prevention. The Engineer shall issue a Taking-Over Certificate accordingly. Provided always that the Works shall not be deemed to have been taken over if they are not substantially in accordance with the Contract.

If the Works are taken over under this Sub-Clause the Contractor shall nevertheless carry out the Tests on Completion during the Defects Liability Period. The Engineer shall require the Tests to be carried out by giving 14 days notice.

Any additional costs to which the Contractor may be put, in making the Tests on Completion during the Defects Liability Period, shall be added to the Contract Price.

For a Contract which includes a high proportion of Plant, an additional Sub-Clause may be necessary.

#### **EXAMPLE SUB-CLAUSE**

## Extension of 49.5 **Defects Liability**

The provisions of this Clause shall apply to all replacements or renewals of Plant carried out by the Contractor to remedy defects and damage as if the replacements and renewals had been taken over on the date they were completed. The Defects Liability Period for the Works shall be extended by a period equal to the period during which the Works cannot be used by reason of a defect or damage. If only part of the Works is affected the Defects Liability Period shall be extended only for that part. In neither case shall the Defects Liability Period extend beyond 2 years from the date of taking over.

When progress in respect of Plant has been suspended under Clause 40, the Contractor's obligations under this Clause shall not apply to any defects occurring more than 3 years after the Time for Completion established on the date of the Letter of Acceptance.

For a Contract comprising dredging work an additional Sub-Clause may be added.

#### **EXAMPLE SUB-CLAUSE**

No Remedying 49.5 of Defects in **Dredging Work** after Completion

Notwithstanding Sub-Clause 49.2, the Contractor shall have no responsibility for the remedying of defects, shrinkages or other faults in respect of dredging work after the date stated in the Taking-Over Certificate.

### Clause 50

For a Contract comprising dredging work and where the second Example Sub-Clause 49.5 has been adopted, an additional Sub-Clause should be added.

## **EXAMPLE SUB-CLAUSE**

## No Responsibility 50.2 for Cost of Searching of **Dredging Work**

Notwithstanding Sub-Clause 50.1, the Contractor shall have no responsibility to bear the cost of searching for any defect, shrinkage or other fault in respect of dredging work after the date stated in the Taking-Over Certificate.

## Clause 51

### **Sub-Clause 51.1 – Variations**

For a Contract comprising dredging and some types of reclamation work the Sub-Clause may require to be varied.

#### **EXAMPLE**

Add final sentence as follows:

Provided also that the Contractor shall be under no obligation to execute any variation which cannot be executed by the Contractor's Equipment being used or to be used on the Works.

Where provision is made in the Contract for payment in foreign currency, this Clause may be varied.

### **Sub-Clause 52.1 – Valuation of Variations**

#### **EXAMPLE**

Add final sentence as follows:

The agreement, fixing or determination of any rates or prices as aforesaid shall include any foreign currency and the proportion thereof.

## **Sub-Clause 52.2 – Power of Engineer to Fix Rates**

Add to first paragraph final sentence as follows:

The agreement or fixing of any rates or prices as aforesaid shall include any foreign currency and the proportion thereof.

## Sub-Clause 52.3 – Variations Exceeding 15 per cent

Add final sentence as follows:

The adjustment or fixing of any sum as aforesaid shall have due regard to any foreign currency included in the Effective Contract Price and the proportion thereof.

Where it is required to place some limitation on the range of items for which the rates and prices may be subject to review, the Clause may be varied.

### Sub-Clause 52.2 – Power of Engineer to Fix Rates

#### **EXAMPLE**

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At the end of the first paragraph add:

Provided further that no change in the rate or price for any item contained in the Contract shall be considered unless such item accounts for an amount more than 2 per cent of the Contract Price, and the actual quantity of work executed under the item exceeds or falls short of the quantity set out in the Bill of Quantities by more than 25 per cent.

### Clause 54

Where vesting of Contractor's Equipment, Temporary Works and materials in the Employer is required, additional Sub-Clauses may be added.

#### **EXAMPLE WORDING AND SUB-CLAUSES**

Sub-Clauses 54.2 and 54.3 shall be renumbered as 54.3 and 54.4 and Sub-Clauses 54.4 to 54.8 shall be renumbered as 54.6 to 54.10. Add additional Sub-Clauses as follows:

## Vesting 54.2

All Contractor's Equipment, Temporary Works and materials owned by the Contractor, or by any company in which the Contractor has a controlling interest, shall, when on the Site, be deemed to be the property of the Employer. Provided always that the vesting of such property in the Employer shall not prejudice the right of the Contractor to the sole use of the said Contractor's Equipment, Temporary Works and materials for the purpose of the Works nor shall it affect the Contractor's responsibility to operate and maintain the same under the provisions of the Contract.

## Revesting and 54.5 Removal

Upon the removal, with the consent of the Engineer under Sub-Clauses 54.1, of any such Contractor's Equipment, Temporary Works or materials as have been deemed to have become the property of the Employer under Sub-Clause 54.2, the property therein shall be deemed to revest in the Contractor and, upon completion of the Works, the property in the remainder of such Contractor's Equipment, Temporary Works and materials shall, subject to Clause 63, be deemed to revest in the Contractor.

60.

60.

60.

*60.* 

Additional Sub-Clauses may be necessary to cover certain other matters relating to payments.

Where payments are to be made in various currencies in predetermined proportions and calculated at fixed rates of exchange the following 3 Sub-Clauses, which should be taken together, may be added:

## EXAMPLE SUB-CLAUSES (to be numbered, as appropriate)

## Currency of Account and Rates of Exchange

The currency of account shall be the (insert name of currency) and for the purposes of the Contract conversion between (insert name of currency) and other currencies stated in the Appendix to Tender shall be made in accordance with the Table of Exchange Rates in the Appendix to Tender. Conversion between the currencies stated in such Table other than the (insert name of currency) shall be made at rates of exchange determined by use of the relative rates of exchange between such currencies and the (insert name of currency) set out therein.

## Payments to Contractor

- All payments to the Contractor by the Employer shall be made:
  - (a) in the case of payment(s) under Sub-Clause(s) 70.2 and (insert number of any other applicable Clause), in (insert name of currency/ies);
  - (b) in the case of payments for certain provisional sum items excluded from the Appendix to Tender, in the currencies and proportions applicable to these items at the time when the Engineer gives instructions for the work covered by these items to be carried out; and
  - (c) in any other case, including Increase or Decrease of Costs under Sub-Clause 70.1, in the currencies and proportions stated in the Appendix to Tender as applicable to such payment provided that the proportions of currencies stated in the Appendix to Tender may from time to time upon the application of either party be varied as may be agreed.

## Payments to Employer

- All payments to the Employer by the Contractor including payments made by way of deduction or set-off shall be made:
- (a) in the case of credit(s) under Sub-Clause(s) 70.2 and (insert number of any other applicable Clause) in (insert name of currency/ies);
- (b) in the case of liquidated damages under Clause 47, in (insert name of currency/ies);
- (c) in the case of reimbursement of any sum previously expended by the Employer, in the currency in which the sum was expended by the Employer; and
- (d) in any other case, in such currency as may be agreed.

If the part payable in a particular currency of any sum payable to the Contractor is wholly or partly insufficient to satisfy by way of deduction or set-off a payment due to the Employer in that currency, in accordance with the provisions of this Sub-Clause, then the Employer may if he so desires make such deduction or set-off wholly or partly as the case may be from the balance of such sum payable in other currencies.

Where all payments are to be made in one currency the following Sub-Clause may be added:

## Currency of Account and Payments

## EXAMPLE SUB-CLAUSE (to be numbered, as appropriate)

The currency of account shall be the (insert name of currency) and all payments made in accordance with the Contract shall be in (insert name of currency). Such (insert name of currency), other than for local costs, shall be fully convertible. The percentage of such payments attributed to local costs shall be as stated in the Appendix to Tender.

Where place of payment is to be defined the following Sub-Clause may be added:

### EXAMPLE SUB-CLAUSE (to be numbered, as appropriate)

#### Place of Payment

Payments to the Contractor by the Employer shall be made into a bank account nominated by the Contractor in the country of the currency of payment. Where payment is to be made in more than one currency separate bank accounts shall be nominated by the Contractor in the country of each currency and payments shall be made by the Employer accordingly.

Where provision is to be included for an advance payment the following Sub-Clause may be added:

#### EXAMPLE SUB-CLAUSE (to be numbered, as appropriate)

#### Advance Payment 60.

An advance payment of the amount stated in the Appendix to Tender shall, following the presentation by the Contractor to the Employer of an approved performance security in accordance with Sub-Clause 10.1 and a Guarantee in terms approved by the Employer for the full value of the advance payment, be certified by the Engineer for payment to the Contractor. Such Guarantee shall be progressively reduced by the amount repaid by the Contractor as indicated in Interim Payment Certificates of the Engineer issued in accordance with this Clause. The advance payment shall not be subject to retention. The advance payment shall be repaid by way of reduction in Interim Payment Certificates commencing with the next certificate issued after the total certified value of the Permanent Works and any other items in the Bill of Quantities (excluding the deduction of retention) exceeds (insert figure) per cent of the sum stated in the Letter of Acceptance. The amount of the reduction in each Interim Payment Certificate shall be one (insert fraction) of the difference between the total value of the Permanent Works and any other items in the Bill of Quantities (excluding the deduction of retention) due for certification in such Interim Payment Certificate and the said value in the last preceding Interim Payment Certificate until the advance payment has been repaid in full. Provided that upon the issue of a Taking-Over Certificate for the whole of the Works or upon the happening of any of the events specified in Sub-Clause 63.1 or termination under Clauses 65, 66 or 69, the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

### Clause 67

Where it is considered desirable to add to Sub-Clauses 67.3 provisions with respect to the number of arbitrators, the place of arbitration and the language of arbitration, the following paragraphs may be added to Sub-Clause 67.3:

#### **EXAMPLE**

The arbitral tribunal shall consist of ..... (a sole or three) arbitrator(s).

*The place of arbitration shall be .....(city and country).* 

The language of the arbitration shall be......

It is desirable that the place of arbitration be situated in a state, other than that of the Employer or the Contractor, which has a modern and liberal arbitration law and which has ratified a bilateral or multilateral convention (such as the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards), or both, that would facilitate the enforcement of an arbitral award in the states of the parties to the Contract.

In the absence of stipulations as to the three above mentioned matters, (number of arbitrators, place of arbitration and language of arbitration), the ICC will decide on the number of arbitrators (typically three in any substantial construction dispute) and on the place of arbitration. The arbitral tribunal will decide on the language of the arbitration if the parties cannot agree.

It may also be considered desirable in some cases for other parties to be joined into any arbitration between the Employer and the Contractor, thereby creating a multi-party arbitration. While this may be feasible, multi-party arbitration clauses require skillful draftmanship on a case-by-case basis. No satisfactory standard form of multi-party arbitration clause for international use has yet been developed.

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Where it is decided that a settlement of dispute procedure, other than that of the International Chamber of Commerce (ICC), should be used the Clause may be varied.

#### **Sub-Clause 67.3 – Arbitration**

#### **EXAMPLE**

Following paragraph (b), delete the words "shall be finally settled... International Chamber of Commerce" and substitute "shall be finally settled under the UNCITRAL Arbitration Rules as administered by (insert name of administering authority)".

Where alternatives to the ICC are considered care should be taken to establish that the favoured alternative is appropriate for the circumstances of the Contract and that the wording of Clause 67 is checked and amended as may be necessary to avoid any ambiguity with the alternative. Care should be taken to define exactly how the arbitral tribunal is to be appointed and, where appropriate, an appointing authority should be designated.

#### Clause 68

## Sub-Clause 68.2 - Notice to Employer and Engineer

For the purposes of this Sub-Clause the respective addresses are:

- (a) The Employer (insert address)
- (b) The Engineer (insert address)

The addresses should be inserted when the documents are being prepared prior to inviting tenders.

#### Clause 69

## Sub-Clause 69.1 - Default of Employer

Where the Employer is a government it may be considered appropriate to vary the Sub-Clause.

#### **EXAMPLE**

Delete paragraph (c) and renumber paragraph (d) as (c).

Where the terms of the Sub-Clause, when read in conjunction with Sub-Clause 69.3, are in conflict with the law of the country the Sub-Clause may require to be varied.

#### **EXAMPLE**

Delete "or" at the end of paragraph (c) and delete paragraph (d).

### Clause 70

Three alternative methods of dealing with price adjustment are given below.

The first alternative is suitable where a contract is of short duration and no price adjustment is to be made:

#### Sub-Clause 70.1—Increase or Decrease in Cost

#### **EXAMPLE**

Delete the text of the Sub-Clause and substitute

Subject to Sub-Clause 70.2, the Contract Price shall not be subject to any adjustment in respect of rise or fall in the cost of labour, materials or any other matters affecting the cost of execution of the Contract.

## Sub-Clause 70.2—Subsequent Legislation

#### **EXAMPLE**

Delete the words ", other than under Sub-Clause 70.1,".

The second alternative is suitable where price adjustment is to be made by establishing the difference in cost between the basic price and the current price of local labour and specified materials:

#### Sub-Clause 70.1—Increase or Decrease in Cost

#### **EXAMPLE**

Delete the text of the Sub-Clause and substitute

Adjustments to the Contract Price shall be made in respect of rise or fall in the cost of local labour and specified materials as set out in this Sub-Clause.

(a) Local Workmen

(i) For the purpose of this Sub-Clause:

"Local Workmen" means skilled, semi-skilled and unskilled workmen of all trades engaged by the Contractor on the Site for the purpose of or in connection with the Contract or engaged full time by the Contractor off the Site for the purpose of or in connection with the Contract (by way of illustration but not limitation: workmen engaged full time in any office, store, workshop or quarry);

"Basic Rate" means the applicable basic minimum wage rate prevailing on the date 28 days prior to the latest date for submission of tenders by reason of any National or State Statute, Ordinance, Decree or other Law or any regulations or bye-law of any local or other duly constituted authority, or in order to conform with practice amongst good employers generally in the area where the Works are to be carried out; and

"Current Rate" means the applicable basic minimum wage rate for Local Workmen prevailing on any date subsequent to the date 28 days prior to the latest date set for submission of tenders by reason of any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, or in order to conform with practice amongst good employers generally in the area where the works are to be carried out.

- (ii) The adjustment to the Contract Price under the terms of this Sub-Clause shall be calculated by multiplying the difference between the Basic and Current Rates for Local workmen by:
- (a) the number of all hours actually worked, and
- (b) in respect of those hours worked at overtime rates, by the product of the number of said hours and the percentage addition required by the law to be paid by the Contractor for overtime.

Such adjustment may be either an addition to or a deduction from the Contract Price.

(iii) No other adjustment of the Contract Price on account of fluctuation in the remuneration of Local Workmen shall be made.

#### (b) Specified Materials

(i) For the purpose of this Sub-Clause:

"Specified Materials" means the materials stated in Appendix (insert reference) to Tender required on the Site for the execution and completion of the Works;

"Basic Prices" means the current prices for the specified materials prevailing on the date 28 days prior to the latest date for submission of tenders; and

- "Current Prices" means the current prices for the specified materials prevailing at any date subsequent to the date 28 days prior to the latest date for submission of tenders.
- (ii) The adjustment to the Contract Price under the terms of this Sub-Clause shall be calculated by applying the difference between the Basic and Current Prices to the quantity of the appropriate Specified Material which is delivered to the Site during the period for which the particular Current Price is effective. Such adjustment may be either an addition to or a deduction from the Contract Price.

- (iii) The Contractor shall use due diligence to ensure that excessive wastage of the Specified Materials shall not occur. Any Specified Materials removed from the Site shall be clearly identified in the records required under paragraph (d) of this Sub-Clause.
- (iv) The provisions of this Sub-Clause shall apply to fuels used in Contractor's Equipment engaged on the Site for the purposes of executing the Works, including vehicles owned by the Contractor (or hired by him under long term arrangements under which the Contractor is obligated to supply fuel) engaged in transporting any staff, labour, Contractor's Equipment, Temporary Works, Plant or materials to and from the Site. Such fuels shall be clearly identified in the records required under paragraph (d) of this Sub-Clause. The provisions of this Sub-Clause shall not apply to any fuels sold or supplied to any employee of the Contractor or to any person for use in any motor vehicle not being used for the purposes of the Contract.
- (v) The Contractor shall at all times have regard to suitable markets and shall, whenever buying materials a variation in the cost of which would give rise to an adjustment of the Contract Price under this Sub-Clause, be diligent to buy or procure the same at the most economical prices as are consistent with the due performance by the Contractor of his obligations under the Contract.

If at any time there shall have been any lack of diligence, default or negligence on the part of the Contractor, whether in observing the above requirements or otherwise, then, for the purposes of adjusting the Contract Price pursuant hereto, no account shall be taken of any increase in cost which may be attributable to such lack of diligence, default or negligence and the amount by which any cost would have been decreased but for such lack of diligence, default or negligence shall be deducted from the Contract Price.

(vi) No other adjustment to the Contract Price on account of fluctuation in the cost of materials shall be made.

## (c) Overheads and Profits Excluded

In determining the amount of any adjustment to the Contract Price pursuant to this Sub-Clause no account shall be taken of any overheads or profits.

### (d) Notices and Records

The Contractor shall forthwith, upon the happening of any event which may or may be likely to give rise to adjustment of the Contract Price pursuant to this Sub-Clause, give notice thereof to the Engineer and the Contractor shall keep such books, accounts and other documents and records as are necessary to enable adjustment under this Sub-Clause to be made and shall, at the request of the Engineer, furnish any invoices, accounts, documents or records so kept and such other information as the Engineer may require.

#### (e) Adjustment after Date of Completion

Adjustment to the Contract Price, after the due date for completion of the whole of the Works pursuant to Clause 43, or after the date of completion of the whole of the Works certified pursuant to Clause 48, shall be made in accordance with Current Rates or Current Prices, as applicable, ruling at the due date for completion or the date stated in the Taking-Over Certificate, whichever is the earlier.

## (f) Determination of Adjustment to Contract Price

The amount of any adjustment to the Contract Price pursuant to this Sub-Clause shall be determined by the Engineer in accordance with the foregoing rules.

#### **EXAMPLE APPENDIX TO TENDER**

for use in conjunction with the second alternative.

#### SPECIFIED MATERIALS REMARKS MATERIAL UNIT PRICE AND TRANSPORT PRICE **DELIVERED** LOCATION TO SITE TO SITE Bitumen Diesel Petrol Lubricants Cement Reinforcing Steel Explosives

#### **NOTES:**

- 1. The Contractor shall provide copies of quotations to substantiate all prices included in the above table.
- 2. All subsequent price substantiation shall be from the same source as original unless otherwise agreed by the Engineer.
- 3. The Contractor shall submit full explanation and provide substantiating documentation for the mode of transport to Site he proposes. Only the proposed documented mode of transport shall qualify for price adjustment.

(Note: Materials stated in the Appendix to Tender should be those of which substantial quantities are involved.)

The third alternative is suitable where price adjustment is to be made through the application of indices in a formula:

#### Sub-Clause 70.1 – Increase or Decrease in Cost

## **EXAMPLE**

Delete the text of the Sub-Clause and substitute

- (a) Adjustments to the Contract Price in respect of rise and fall in the cost of labour and materials and other matters affecting the cost of execution of the Works shall be calculated for each monthly statement pursuant to Sub-Clause 60.1, the Statement at Completion pursuant to Sub-Clause 60.5 and the Final Statement pursuant to Sub-Clause 60.6 in accordance with the provisions of this Sub-Clause if there shall be any changes in the following Index figures compiled by (insert details of source of indices) and published by (insert details of publication):
  - (i) the Index of the cost of Labour in (insert name of country),
  - (ii) the Index of the cost of (insert other factor, as relevant), or
  - (iii) the Index of the cost of (insert other factor, as relevant).
- (b) For the purpose of this Sub-Clause:
  - (i) "Base Index Figure" shall mean the index figure applicable on the date 28 days prior to the latest date for submission of tenders, and
  - (ii) "Current Index Figure" shall mean the index figure applicable on the last day of the period to which the particular statement relates.

Provided that in respect of any work the value of which is included in any such monthly statement (or Statement at Completion or Final Statement) and which was executed after the due date (or extended date) for completion of the whole of the Works, pursuant to Clause 43, the Current Index Figure shall be the index figure applicable on the aforesaid due date (or extended date) for completion of the whole of the Works.

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- (iii) "Effective Value" shall be the difference between:
- (a) The amount which is due to the Contractor under the provisions of Sub-Clauses 60.2, 60.5 or 60.8 (before deducting retention and excluding repayment of the advance payment) less any amounts for:

work executed under nominated Subcontracts

materials and Plant on the Site, as referred to in Sub-Clause 60.1 (c)

dayworks, variations or any other items based on actual cost or current prices, and bonuses (if any)

adjustments under Clause 70,

and

- (b) The amount calculated in accordance with (b) (iii) (a) of this Sub-Clause and included in the last preceding statement.
- (c) The adjustment to the Contract Price shall be calculated by multiplying the Effective Value by a Price Fluctuation Factor which shall be the net sum of the products obtained by multiplying each of the proportions given in paragraph (d) of this Sub-Clause by the following fraction:

## Current Index Figure - Base Index Figure

## Base Index Figure

calculated using the relevant index figures.

- (d) For the purpose of calculating the Price Fluctuation Factor, the proportions referred to in paragraph (c) of this Sub-Clause shall (irrespective of the actual constituents of the work) be as follows:
  - 0. in respect of labour (and supervision) costs subject to adjustment by reference to the Index referred to in (a) (i) of this Sub-Clause;
  - 0. in respect of by reference to the Index referred to in (a) (ii) of this Sub-Clause;
  - 0. in respect of by reference to the Index referred to in (a) (iii) of this Sub-Clause;
  - 0. in respect of all other costs which shall not be subject to any adjustment:

1.00 Total

(e) Where the value of an Index is not known at the time of calculation, the latest available value shall be used and any adjustment necessary shall be made in subsequent monthly statements.

(Note: The number of indices included under (a) of this Sub-Clause may be varied, if it is determined that a different number of factors should be separately identified, and in such case (d) of this Sub-Clause must be altered to be consistent.)

## Clause 72

#### **Sub-Clause 72.2 – Currency Proportions**

Where it is decided that the rate or rates of exchange shall be established from a source other than the Central Bank of the country, the Sub-Clause may be varied.

#### EXAMPLE

Delete the words from "prevailing..." to the end of the sentence and substitute "stated in the Appendix to Tender".

#### Clause 73 onwards

Where circumstances require, additional Clauses may be added.

EXAMPLE CLAUSES (to be numbered, starting with Clause 73, as appropriate).

Where the law applicable to the Contract does not cover bribery, the following example Clause may be added.

#### **Bribes**

or agrees to offer or give to any person, any bribe, gift, gratuity or commission as an inducement or reward for doing or forbearing to do any action in relation to the Contract or any other contract with the Employer or for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer, then the Employer may enter upon the Site and the Works and terminate the employment of the Contractor and the provisions of Clause 63 hereof shall apply as if such entry and termination had been made pursuant to that Clause.

Where circumstances require that particular confidentiality is observed, the following example Clause may be added.

## Details to be Confidential

.1 The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer or the Engineer. If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract the same shall be referred to the Employer whose determination shall be final.

Where the Contract is being financed wholly or in part by an international financial institution whose rules or policies require a restriction on the use of the funds provided, the following example Clause may be added.

## Expenditure Restricted

.1 The Contractor shall not make any expenditures for the purpose of the Contract in the territories of any country which is not a member of (insert name of international financial institution) nor shall he make any expenditure for goods produced in or services supplied from such territories.

Where the Contractor may be a joint venture, the following example Clause may be added.

## Joint and Several Liability

11 If the Contractor is a joint venture of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfilment of the terms of the Contract and shall designate one of such persons to act as leader with authority to bind the joint venture. The composition or the constitution of the joint venture shall not be altered without the prior consent of the Employer.

# PART II – CONDITIONS OF PARTICULAR APPLICATION

Index	Clause
Access to Data	11.2
Accident Prevention Officer	34.
Accidents, Reporting of	35.
Additional Clauses	73.
Alcoholic Liquor	34.
Arbitration	67.
Arms and Ammunition	34.
Bonus for Completion	47.3
Boreholes and Exploratory Excavation	18.1
Burial of the Dead	34.
Cash Flow Estimate to be Submitted	14.3
Changes in Cost and Legislation	70.
Conditions of Labour and Rates of Wages	34.
Contract Agreement	9.1
Contractor's Equipment, Insurance of	21.1
Contractor's Representative, Language Ability of	15.2
Currency of Account and Rates of Exchange	60.
Currency Proportions	72.2
Data, Access to	11.2
Default of Employer	69.1
Disorderly Conduct	34.
Documents, Order of Precedence	5.2
Drugs	34.
Employer, Name and Address	1.1
Employment of Local Personnel	16.4
Employment of Persons in Service of Others	34.
Engineer, Name and Address	1.1
Engineer's Duties	2.1
Environment, Protection of	19.1
Epidemics	34.
Exploratory Excavation and Boreholes	18.1
Extension of Defects Liability	49.5
Facilities for Other Contractors	31.2
Festivals and Religious Customs	34.
Foodstuffs, Supply of	34.
Health and Safety of Staff and Labour	34.
Housing for Labour	34.
Inspection of Site	11.1
Insurance of the Works and Contractor's Equipment	21.1
Insurances Arranged by the Employer	21.
	23 & 25
Interpreter to be made Available	15.2
Labour, Conditions of and Rates of Wages	34.
Labour, Health and Safety	34.
Labour, Housing for	34.
Labour, Rates of Wages and Conditions	34.
Labour, Repatriation of	34.
Labour, Special Provision for	34.
Language Ability of Contractor's Representative	15.2

Index	Clause
Language, Ability of Superintending Staff	16.3
Language, Ruling	5.1
Language/s	5.1
Law Applicable	5.1
Local Personnel, Employment of	16.4
Measures Against Insect and Pest Nuisance	34.
No Remedying of Defects in Dredging Work after Completion	49.5
No Responsibility for Cost of Searching of Dredging Work	50.2
Not Foreseeable Physical Obstructions or Conditions	12.2
Notice to Employer and Engineer	68.2
Other Contractors, Facilities for	31.2
Other Contractors, Opportunities for	31.1
Payments to Contractor	60.
Payments to Employer	60.
Performance, Example of Security Bond for	10.1
Performance Guarantee, Example	10.1
Performance Security	10.1
Performance Security, Source of	10.4
Physical Conditions or Obstructions, Not Foreseeable	12.2
Place of Payment	60.
Power of Engineer to Fix Rates	52.2
Prevention from Testing	48.5
Programme to be Submitted	14.1
Protection of the Environment	19.1
Rates of Exchange	60.
Rates of Wages and Conditions of Labour	34.
Records of Safety and Health	35.
Religious Customs and Festivals	34.
Repatriation of Labour	34.
Reporting of Accidents	35.
Revesting and Removal of Contractor's Equipment,	
Temporary Works and Materials	54.5
Royalties	28.2
Safety, Security and Protection of the Environment	19.1
Security, Safety and Protection of the Environment	19.1
Site, Inspection of	11.1
Source of Performance Security	10.4
Staff, Health and Safety of	34.
Submission of Cash Flow Estimate	14.3
Submission of Programme	14.1
Superintending Staff, Language Ability of	16.3
Supply of Foodstuffs	34.
Supply of Water	34.
Surety Bond for Performance, Example of	10.1
Suspension of Work	40.1
Testing, Prevention from	48.5
Fime for Completion	43.1
Valuation of Variations	52.1
Variations	51.1
Variations Exceeding 15 per cent	52.3
Vesting of Contractor's Equipment, Temporary Works and Materials	54.2
Water, Supply of	34.
Working Hours	45.1
Works, Insurance of	21.1

## **EDITORIAL AMENDMENTS IN 1988**

Following publication in 1987 of the Fourth Edition of the Conditions of Contract for Works of Civil Engineering Construction, a number of editorial amendments were agreed by FIDIC. The amendments have been incorporated during reprinting in 1988 and the list below clarifies the differences between the 1988 reprint and the original document.

- **Page** 5 Clause 9. The words "as stated in Sub-Clause 9.1 of Part 1 of these Conditions" have been added to the final line of the first paragraph.
- **Page** 6 Sub-Clause 12.2. A comma has been moved from after the word "words" to immediately before the word "other". The word "Site" has been capitalised.
- Page 7 Example performance guarantee. A comma previously appeared between the words "and" and "complete" in the third line of the paragraph beginning "Whereas".
  The fifth line of the paragraph beginning "Now the Condition . . ." previously read ". . . default by the Contract . . ."
  - **Page** 12 Sub-Clause 21.3. (b) (ii). A full stop has been inserted following "50".
  - **Page** 13 Sub-Clause 34. Repatriation of Labour. A comma has been inserted between the words "country)" and "shall".
  - Sub-Clause 34. Epidemics. The word "Contractor" has been capitalised in the first line.
     Sub-Clause 34. Alcoholic Liquor or Drugs. The word "Contractor" has been capitalised in the first line.
  - **Page** 15 Sub-Clause 40.3. This was previously incorrectly listed as 40.2.
  - **Page** 17 Sub-Clause 49.5. The last line of the first paragraph previously read "... extend beyond 730 days".
  - **Page** 20 Sub-Clause 67.3. The word "a" previously appeared before the bracket on the penultimate line of the Example.
  - **Page 21** Sub-Clause 70.2. A comma has been moved from after the word "words" to immediately before the word "other".

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## **FURTHER AMENDMENTS IN 1992**

The following amendments have been made to the 1988 reprint of the Fourth Edition. In addition, some minor changes in the use of punctuation marks (commas, semicolons, colons and stops), as well as the use of the words "or" and "and" have been introduced to attain uniformity in the style of all Clauses. These minor changes which improve the style, but which have no effect on the meaning of Clauses, have not been listed below.

#### **Contents**

The words "Index" and "Editorial Amendments" have been added at the bottom of the page.

- **Page** 1 INTRODUCTION. The words ", subject to minor modifications" have been added, and the word " equally" changed to read "also".
- **Page** 3 Sub-Clause 1.1. In the last sentence, the words "for example the name of an International Financing Institution (IFI)" have been deleted.
- **Page** 4 Clause 9. In the first paragraph the words "of Part I" have been added. In the second paragraph "1" has been corrected to read "I".
- **Page** 5 Clause 12. Sub-Clause 12.2. In the title the word "Adverse" has been changed to read "Not Foreseeable" (also amended in the Contents and the Index).
- **Page** 10 Sub-Clause 21.1, sub-para (a). The words "(the term "cost" in this context shall include profit)" have been added.
- **Page** 13 Example Sub-Clause for Supply of Foodstuffs. The words "staff and labour, or his Subcontractors" have been changed to read "staff, labour and Subcontractors"
- **Page** 19 Example Sub-Clause for Advance Payment. The words "interim certificate" have been changed to read "Interim Payment Certificate", in both the singular and plural.

Clause 67. The first four paragraphs of the commentary have been added.

- Page 24 Sub-Clause 70.1. In the formula, the word "Based" has been corrected to read "Base".
- **Page** 25 Example Clause for Bribes. The word "Sub-contractors" has been corrected to read "Subcontractors".

Example Clause for Details to be Confidential. In the sixth line, the words "the decision of" have been deleted. In the seventh line, the word "award" has been changed to read "determination"

Example Clause for Expediture Restricted. In the commentary and text, the leading capital letters on the words "International Financing Institutions" have been changed to small letters. In the commentary, the word "Articles" has been changed to read "rules or policies". In the third line, the word "not" has been corrected to read "nor".

EDITORIAL AMENDMENTS (1988). In the last item, the words "Line 21" have been corrected to read "Page 21".