

CHENNAI METRO RAIL LIMITED

(A JOINT VENTURE OF GOVERNMENT OF INDIA AND GOVERNMENT OF TAMILNADU)

SELECTION OF TENDERER FOR Station Repair works and Maintenance

Part I - Technical Tender Qualifying criteria

DATE FOR SUBMISSION OF TENDER ON 09-02-2017 at 15.00 Hours

DATE FOR OPENING OF TENDER ON 09-02-2017 at 15.30 Hours

TO BE SUBMITTED TO:

Director(Projects)
Chennai Metro Rail Limited
Admn. Building, CMRL Depot
Poonnamallee High Road,
Koyambedu, Chennai - 600107

M/s	_		
Address	-		
	-		

CHENNAI METRO RAIL LIMITED

(A JOINT VENTURE OF GOVERNMENT OF INDIA AND GOVERNMENT OF TAMILNADU)

TECHNO COMMERCIAL TENDER (TWO COVER SYSTEM)

Part 1-Qualification Criteria

For

SELECTION OF TENDERER FOR Station Repair works and Maintenance

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I. NOTICE INVITING TENDER

SELECTION OF TENDERER FOR Station Repair works and Maintenance works

TWO COVER SYSTEM

Tender Notice No: CMRL/CON/ZT-02/2016

1. Government of India proposes to **select tenderer for Station Repair works and Maintenance works**. On behalf of the President of India, the Director (Projects), CMRL, Depot, Koyambedu, Chennai 600 107 Tamil Nadu, India invites tender for SELECTION OF TENDERER FOR Water leakage repair works and maintenance works under the two cover system.

The TENDERER to be eligible for Qualification, should fulfill the following qualification criteria:

- a) The TENDERER should be a well-established and reputed Engineering Contractor, registered as a legal entity in India, and having experience of minimum seven years in the field of Civil Engineering and its associated works.
- b) Experience of having successfully completed similar works during the last 7 years ending on 31.12.2016.

Three Similar completed works costing not less than Rs.120 lakhs each.

or

Two Similar completed works costing not less than Rs.150 lakhs each.

or

One Similar completed works costing not less than Rs.240 lakhs.

The Experience certificate for having satisfactorily completed is to be obtained from the engineers not below the rank of Executive Engineer / Director / Head of procurement department / equivalent and the same should be in originals.

- c) The TENDERER should have an average annual turnover of Rs.90 lakhs during the past three financial years, ending on 31st March, 2016.
- d) The successful TENDERER shall ensure that, no sub-contractor will be engaged for this work in whole or part, for which TENDERER should submit the affidavit duly signed.
- e) Should have adequate material & equipment resources to complete the works within the scheduled period, for which the TENDERER should assure, fill and submit the appropriate format F in the prequalification document duly signed.

1. Salient features:

Name of work	Station Repair works and Maintenance works
Period of Completion	18 Months (From the date of issuing LOA)

2. Tender documents can be purchased from the office of the **Director(Projects)**, **CMRL**, **Depot**, **Koyambedu**, **Chennai** Tamil Nadu, India

(a)	Cost of Tender Document (Including VAT) Non-refundable.	Rs.10000/- (Rupees Ten Thousand only) including tax by Demand Draft drawn from any Nationalized or Scheduled Banks in India payable at Chennai, in favour of the Chennai Metro Rail Ltd, Chennai-107, Tamil Nadu, for hard copy and Rs 8,000/- (Rupees Eight Thousand only) for downloading using web access.
(b)	Period of Issue of tender documents	10-01-2017 to 08-02-2017 (during office hours -10.00am to 15.00 hours)
(c)	Earnest Money Deposit (EMD)	Rs.3,00,000/- (Rupees Three laks only) by Demand Draft, drawn from any Nationalized or Scheduled Bank in India payable at Chennai, in favour of the Chennai Metro Rail Ltd, Chennai- 107 Tamil Nadu, India (OR) by Bank Guarantee on any Nationalized or Scheduled Bankers in India, valid upto 05.05.2017
(d)	Pre-tender Meeting	15.00 Hours on 25.01.2017 at the office of Director (Projects), CMRL, Koyambedu, Chennai 600 107.
(e)	Issue of pre tender clarifications	On or before 12:00 Hours, 01.02.2017
(f)	Last date for submission of tenders	15.00 Hours on 07.02.2017
(g)	Opening of Technical Tender	15.30 Hours on 07.02.2017

Only one set of document will be issued. Tenderers have to take additional copies.

The tender document is available in the CMRL website viz. www.chennaimetrorail.org. The tenderer can purchase the tender document from the Office of CMRL, Depot, Koyambedu Chennai and payment to be made towards the tender document in the form of demand draft drawn from any Nationalized or Scheduled Banks in India payable at Chennai, in favour of the - Chennai Metro Rail Ltd, Chennai- 107, Tamil Nadu, India,

CMRL reserves the right to accept / reject any one / all the tenders without assigning any reason thereof.

Evaluation of tender will be done by a committee constituted by CMRL or NIT approving authority.

Director(Projects)
Chennai Metro Rail Limited,,
Depot, Koyambedu, Chennai 600107
Tamil Nadu, India

II. INFORMATION AND INSTRUCTIONS TO TENDERERS

1.00 General:

Government of India proposes to **tenderer for Water leakage repair works and maintenance works** under the two cover system from the Contractors who meet the following criteria:

1.01 Definitions:

- i. **TENDER:** shall mean the set of TENDER DOCUMENTS submitted by a TENDERER.
- *ii.* **TENDER DOCUMENT:** shall mean set of documents consisting of Techno Commercial Tender with Drawings.
- iii. Employer: Director(Projects), Chennai Metro Rail Limited, Ponnamalle High Road, Koyambedu, Chennai 600 107 Tamil Nadu, India who will also be referred as Employer / Owner
- iv. **TENDERER:** shall mean the firm, who has purchased the TENDER documents to submit for Techno Commercial Tender to execute the said works.
- v. Works shall mean all works to be executed in annual repair and maintenance works.
- vi. **Contract:** shall mean the Contract entered into between the Employer and the successful TENDERER on award of Contract for the **Works.**
- vii. Engineer shall mean CMRL Engineer
- viii. **Contractor** shall mean the qualified engineering Contracting firm, whose tender for Contract works has been accepted by **the Employer** and to whom a letter of award has been issued and accepted / who enters into agreement / contract with the Employer and executes the works after *observing* due formalities. The Contractor will co-operate and co-ordinate with Employers / Architects & Other independent specialist contracting Agencies, if any appointed by the Employer, to execute certain special nature of works and undertake responsibility to complete all the works concurrently, within the time frame of the Project Completion Period and ensure sequential, unhindered and harmonious progress of work. The Contractor shall include their executives, authorized representatives, administrators, successors and permitted assignees and such contractors.
- 1.02 **TENDERS** are invited by the Employer from, reputed Civil contractor well established and reputed, registered as a legal entity in India for a minimum period of seven years involved in similar nature of works in India. The notice inviting tender is published in leading news papers and also available in web site **www.chennaimetrorail.org** and the tender documents will not be available for e-submission.
- 1.03 **TENDER DOCUMENT** can be obtained from the office of the Director(Projects), Chennai Metro Rail Limited, Ponnammale high Road, Depot, Koyambedu Chennai, Tamil Nadu, India from 06-01-2017 to 06-02-2017, upon payment of non-refundable amount of *INR*.5,000 including tax, in the form of Demand Draft, obtained from any Nationalised / Scheduled banks in India, payable at Chennai, *drawn* in favour of the Chennai Metro Rail Ltd, Chennai 107. Tender documents can also be downloaded from the above website, **for which the cost of tender document will have to be paid in the form of demand draft** drawn from any Nationalized or Scheduled Banks in India payable at Chennai, in favour of Chennai Metro Rail Limited, Depot, Koyambedu, Chennai, Tamil Nadu, India (along with the prequalification document). Without the submission of cost of tender document (in the form of DD) along with the tender will not be considered for evaluation.

- 1.04 Letter of Transmittal and information required for Qualification shall be submitted as per **Appendix "A"** attached.
- 1.05 TENDERS are not transferable and will be accepted, only from the parties, who have purchased the documents from the office of CMRL.
- 1.06 All information called for, shall be furnished against the respective columns in the enclosed form. If the space in the format is insufficient for furnishing full details, separate sheets may be used duly stating the reference to the format and serial number therein. Separate sheets shall be used for each format. If information is furnished in a separate document, reference to the same should be given against respective column(s). If information is 'Nil" it should also be mentioned as "Nil" or "No such case". If any particular query is not applicable to the TENDERER it should be stated as "Not applicable". However, the TENDERERS are cautioned that not giving complete information called for in the Tender in the form required or not giving it in clear terms or making any change in the prescribed forms may result in disqualification of the TENDERER.
- 1.07 The tender should be submitted in English only. Supporting documents such as Annual accounts, Balance sheets, Employer's Certifications, Testimonials etc., if attached in any other language should be translated in English. The Embassy / Official Diplomatic Mission of the TENDERER's country in India must certify that English documents are true and accurate translation of original documents.
- 1.08 The Tender Document shall be submitted in duplicate in typewritten / handwritten form. The TENDERER'S signature and seal of the firm shall appear on each page of the Tender.
- 1.09 Overwriting shall be avoided. Mistakes shall be scored through and corrections incorporated and attested by the authorised signatory. All pages of the TENDER document shall be numbered, signed and submitted in a single packet along with a signed letter of transmittal.
- 1.10 References, Information and Certificates from the respective Employers certifying for performance and suitability, technical know-how or capability of the TENDERER shall be signed by the authorised signatory of Employer.
- 1.11 The TENDERER is advised to furnish any additional information, which they think is necessary in regard to their capabilities. No further information will be entertained after submission of Qualification TENDER document, unless it is called for by the Employer.
- 1.12 Tender Document details and enclosures shall be addressed and submitted in sealed envelopes and addressed to Director(Projects), Chennai Metro Rail Limited, Depot, Koyambedu, Chennai 6000107, Tamil Nadu, **India** as detailed in clause 8.01. Tender submitted late will not be opened. All times and dates mentioned in this Tender Notice and application are Indian Standard Time (IST) only. The same will be followed for communication and other purposes.
- 1.13 Documents submitted in connection with the Tender, will be treated as CONFIDENTIAL and will not be returned.
- 1.14 The cost incurred by TENDERERS in preparing their Tender, in collecting information, in providing clarifications or attending discussions, conferences or in making presentations, site visit etc. in connection with this TENDER will not be reimbursed by the Employer under any circumstances
- 1.15 Any clarification given by the Employer on his own will be forwarded to all those who have been given a copy of the TENDER documents.
- 1.16 The Employer reserves the right to reject any or all TENDERS or reduce the scope, without assigning any reasons whatsoever and without incurring any liability to whomsoever.
- 1.17 Canvassing or influencing in any form will entail disqualification.

1.18 The Employer reserves the right to approach individuals, employers, companies and corporations to verify TENDERER'S competency and general reputation.

2.00 BRIEF DESCRIPTION OF THE WORK:

The scope of the works will include but will not be limited to.

- Carrying out civil maintenance works and providing manpower for the civil maintenance works.
- 2. Availing required work permit before commencing the work.

The quotes rates should be inclusive of above works

- 2.01 The particulars of the proposed **Works** given herein must be considered only as advance information and a general guide to assist TENDERERS.
- 2.02 The period of completion of the work will be 18 Months.
- 2.03 All documents/method statements, prepared by the Construction firm shall have to be reviewed and approved by the Employer / Employer's personnel, before commencement of works. All works shall have to be carried out, in compliance with relevant Indian standard (IS) Codes, International Codes and local bye-laws.
- 2.04 Validity of tender: 90 days from the date of submission of tender.

3.0 IMPORTANT CONDITIONS OF CONTRACT:

- 3.01 The Contract shall be Item rate contract.
- 3.02 Conditions of Contract, will be as per standard practice and duly modified to suit local conditions incorporating Mobilization advance, performance bond, retention money, liquidated damages, Compensation Events, default Arbitration clauses etc. The contractor shall be responsible for procurement of all quality materials, required for due performance of the contract.
- 3.03 Since the project is to be implemented strictly on the time schedule, the employer may extend the deadline for submission of tenders *by* issuing an amendment in which case, all rights and obligations of the Employer and Tenderer previously *ensured in* the original deadline, will then be *shifted* to the new deadline. The Employer will lay high emphasis on the capacity of the selected contractor to deploy high-tech and speedy construction techniques, high degree of planning, good procurement and quality check procedures, quality assurance Plan, Environment and Safety Plan to meet the appropriate standards, execution and co-ordination, ability to prepare PERT network and *adhering to it meticulously*.
- 3.04 Therefore the TENDERERS are required to demonstrate with firm examples of deployment of above techniques in their previously completed project. The commendable performance by the TENDERER in their previous Projects will receive special consideration. (*)
- 3.05 The schedule of Quantities given in Bill of Quantities is provisional and is meant to indicate the scope of the work and to provide a uniform basis for Tendering. The Owner reserves the right to increase or decrease any of the quantities or to totally omit any item of work and the Contractor shall not claim any extras or damages on these grounds.
- 3.06 Quantity variation will have no ceiling limit in respect of individual items and individual quantities can vary to any extent. Such variations shall not warrant any claims for modifications to already quoted and accepted rates. The contract sum is subject to change as a result of not operating any of the items mentioned in the BOQ and as a result of not operating all the quantities mentioned against each item. The contractor shall not claim anything extra or damages on this account as the quantities are approximate only.

3.07 Price Adjustment Clause:

Price Adjustment Clause is not applicable for this work.

EARNEST MONEY DEPOSIT:

The Earnest Money Deposit of INR 3,000,000/- (Rupees Three laks only) must accompany the Qualification *Tender* for this work.

- 3.07.1 The EMD may be produced in any one of the following forms
 - Demand Draft issued by any one of the Nationalized or Scheduled Bank of India drawn in favour of Chennai Metro Rail Ltd., Chennai – 107.
 - ii. Bank Guarantee from any Nationalised Bank or Scheduled Bank of India.

Note: (*) denotes requirement of enclosure(s) along with Tender.

- 3.07.2 Qualification schedule not accompanied by EMD will be rejected as Non-responsive tender.
- 3.07.3 If the TENDERER withdraws his tender after the acceptance of the tender (or) fails to pay the requisite security deposit amount within the specified period of time the EMD remitted with the *Tender* will be forfeited.

3.08 PERFORMANCE BOND:

- 3.08.1 The successful TENDERER shall furnish a Performance Bond in the shape of irrevocable Bank guarantee for an amount equivalent to 7.5% of the total contract value within 7 days from the date of receipt of Letter of Award. If the successful TENDERER fails to execute the contract (i.e. signing the agreement) within 15 days, the EMD amount remitted will be forfeited.
- 3.08.2 The Performance Bond will be valid till the end of the Defects Liability Period
- 3.08.3 In addition to the aforesaid Performance Bond, CMRL shall deduct from the running account bills, a sum of equivalent to 2.5% of the total value of each bill as retention money.
- 3.08.4 Out of the total accumulated retention money of 2.5% up to the end of the completion of project, 1.25% of the said amount will be released to the contractor in the final bill.
- 3.08.5 The balance of 1.25% of the total value of work, will be retained in the final bill of the work, for a period of 2 years (Defect Liability period) reckoned from the date of completion of the work, or as soon after the expiration of such period of 2 years as all defects, shall have been made good accordingly to the true intent and meaning hereof, whichever shall last happen, and , shall be refunded to the contractor, after the defects liabilities attached to the contractor is over, after deducting any amount due to the Department, subject to the following conditions.
 - a. The Employer concerned should certify that no liability is due from the Contractor.

4.0 ELIGIBLE TENDERERS for applying :

- 4.01 The firms applying for eligibility should have extensive experience and proven track record in similar works. Similar work means water proofing works executed both in concrete and roof sheet structures.
- **4.02** The Tender made by a partnership firm, shall be signed by all the partners of the firms above their full typewritten / handwritten names and current addresses, or alternatively by a partner

holding Power of Attorney for the firm, in which case, a certified copy of the Power of Attorney shall accompany the Tender. A certified copy of the deed, full names and current addresses of all the partners of the firm shall also accompany the Tender. (*)

- 4.03 The Tender made by a firm shall be signed by Authorised signatory but appropriate evidence should be enclosed for authorizing the signing person in the tender document. (*)
- 4.04 The financial Tenders of only those Tenderer, who fulfill the eligibility criteria mentioned in the Notice Inviting Tender and mentioned in Clause No.5 below, will be opened.
- 4.05 Any change in the legal status of a TENDERER subsequent to submission of Tender will be subject to approval of **the Employer**
- 4.06 TENDERERs under Joint Venture arrangements are not permitted.

Note: (*) denotes requirement of enclosure(s) along with Tender.

5.0 QUALIFYING CRITERIA:

- 5. 01 The TENDERER to be eligible for Qualification, should fulfill the following qualification criteria:
 - a) The TENDERER should be a well-established and reputed Engineering Contractor, registered as a legal entity in India, and having experience of minimum seven years in the field of Civil Engineering and its associated works.
 - Experience of having successfully completed similar works during the last 7 years ending on 31.12.2016.

Three Similar completed works costing not less than Rs.120 lakhs each.

or

Two Similar completed works costing not less than Rs.150 lakhs each.

or

One Similar completed works costing not less than Rs.240 lakhs.

The Experience certificate for having satisfactorily completed is to be obtained from the engineers not below the rank of Executive Engineer / Director / Head of procurement department / equivalent and the same should be in originals.

- c) The TENDERER should have an average annual turnover of Rs.90 lakhs during the past three financial years, ending on 31st March, 2016.
- d) The successful TENDERER shall ensure that, no sub-contractor will be engaged for this work in whole or part, for which TENDERER should submit the affidavit duly signed.
- e) Should have adequate material & equipment resources to complete the works within the scheduled period, for which the TENDERER should assure, fill and submit the appropriate format F in the prequalification document duly signed.
- Similar nature of works means having experience in carrying out civil construction/maintenance works
- 5.02 The TENDERER should further furnish evidence for the following.
 - (i) That they have the required minimum tools, plant and equipment
 - (ii) That the TENDERER / Firm shall have a minimum Supervisory Staff of one Project Manager and other Engineers with qualification and field experience.

Exclusively for carrying out this Project, other than the supporting staff for executing the work without any complications.

6.0 SITE VISIT:

6.01 The TENDERER shall, prior to submission of the tender for the work at his own responsibility and risk, visit and examine the site of work & its surroundings with prior intimation to **the Employer** for proper assessment of the prospective assignment. The TENDERER should refer to the Site Plan, and Location Map, enclosed with the list of drawings.

7.0 SUBMISSION OF TENDER DOCUMENTS:

Sealed Tenders should be addressed to the Director(Projects), **Chennai Metro rail Ltd, Depot, Koyambedu, Chennai 107** and superscripting, the name of the Tender on the top left hand corner of the cover and the name of the TENDERER on the bottom left hand corner of the cover and sent so as to reach him not later than 15-00 hours on 07.02.2017

The Tender shall be two cover system / Two part tender system, Cover 1 consists of Part – I: Qualification criteria Tender along with EMD, Part – III: General conditions and particular conditions. Cover 2 consists of Part-II: Bill of Quantities. Both the covers should be submitted in separate sealed Covers -1 & 2 (i.e. Part I & Part III in cover -1 & Part II in cover -2) and have to be submitted together put in a common sealed cover.

Part – I Qualification criteria of the Tender document, Part-III:General conditions and particular conditions consists of Part - I (A), I(B) & I(C), pertaining to Conditions of Contract (I-A), Technical Specification (I-B) and Qualification criteria (I-C) and Part – II (Price Tender) of Tender document, pertaining to *Bill* of Quantities shall be submitted in duplicate i.e. one original and one copy. *All the other enclosures that the* TENDERERs wish to submit shall also be in duplicate. (Part 1-B Technical Specification: Duplicate copy need not be submitted.)

All *Tender* Drawings duly signed and affixed with the seal of the TENDERER shall be returned in a separate cover and need not be sealed, at the time of submission of the Tender.

A Tender which is not accompanied by EMD, in the approved form in a separate envelope attached to the sealed cover will be rejected.

The duly sealed Tenders shall be submitted to the Employer after superscribing the name of work, Tender Part No., and name of TENDERER, so as to reach him not later than the due date and time specified above.

No indication of Tender value or any financial aspect of Tender shall be made in any manner in any of the enclosures, covering letter etc. in Cover- 1 containing Part-1(A), (B) & (C) (Technical and Qualification Tender). If so, such Tender will be rejected.

Documents submitted in connection with the Tender will not be returned.

In addition to the identification required above, the inner envelopes shall include the name and addresses of the TENDERER to enable the Tender to be returned as unopened, in case it is declared late.

If the outer envelope is not sealed and marked as above, the employer will assume no responsibility for misplacement or premature opening of the tender and the tender will be treated on the grounds of not substantially responsive.

To be eligible for Qualification, TENDERERS shall provide, evidence to the suitability of their meeting the Criteria indicated in Clause – 5.0 above and furnish details giving their full biodata, organisation, technical experience, plant and equipments etc. to establish their capacity

and competence, and possession of adequate resources to carry out the contracts effectively and for this, the TENDERS submitted shall include the following: (*)

- a) Letter of transmittal; as in Appendix A
- b) Copies of original documents defining the legal status of the TENDERER, its structure and organisation, place of registration and principal place of business of the TENDERER in Format A.
- c) The qualification and experience of key personnel proposed for the administration and execution of the contract, both on and off site in the format prescribed in Format-B.
- d) Details of Financial Information in Format C
- Details of completed works of similar nature in Format- D as at date of Tender.
- f) Details of on-going works of similar nature in Format- E as at date of Tender.
- g) Details of Plant, machinery & equipment in Format F
- h) Details of termination of contract by Employer, if any, in Format G
- i) Certificates in support of suitability, technical know-how and capability for having successfully completed the works during the last seven years.
- j) Details of cases of having been barred or black listed from the Tendering process, if any. Black-listed Agencies' Tender is liable to be rejected.
- k) The tender should be submitted in English only. Supporting documents such as Annual accounts, Balance sheets, Employer's certifications, Testimonials etc., if attached, in any other language, should be translated in English. The Embassy / Official Diplomatic Mission of the TENDERER's country in India must certify that English documents are true and accurate translation of original documents.
- All times and dates mentioned in this Tender Notice and application are Indian Standard Time (IST). Indian Standard Time only will be followed for communication and other purposes.
- j) The tenderer has to submit the following records along with the tender
 - i. PAN of the Bidder (Please enclose the attested photocopy of PAN card issued by Income Tax Department)
 - ii. Service Tax / VAT Number of the Bidder(Please enclose the attested photocopy of Service Tax / VAT Registration Certificate issued by relevant authorities)
 - iii. ESI Registration(Please enclose attested photocopy)
 - iv. PF Registration of the Bidder (Please enclose attested photocopy of Provident Fund Commissioner)
- 7.01 The TENDERERS for qualification shall provide all facilities to **the Employer** for verification of the information / details furnished by them and also for inspection of their works carried out / in progress, if requested.

8.0 **PARTICULAR ATTENTION:**

- 8.01 The **EMPLOYER** reserves his rights to disqualify any TENDERER if:
 - (i) The TENDERERS have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification and requirements;
 - (ii) The TENDERER's track record of poor performance such as abandoning the work, not properly completing the Contract, inordinate delays in completion or financial failures etc.

- (iii) The TENDERERS have suits lodged / admitted / pending against it in a Court of Law for proceedings for declaration of Bankruptcy, etc or any suit, which challenges the basic existence of the TENDERER and substantially influences its capacity to implement the **Works** satisfactorily. Information on the legal matters is to be submitted.
- (iv) The TENDERER shall unconditionally waive all rights in respect of challenging in any court any matter concerning this TENDER evaluation and award / termination of Contract.

9 FINAL DECISION MAKING AUTHORITY:

- 9.1 The main criteria for the selection of Contractors for the work will be on the consideration of their ability to fulfill their obligations under the Contract. and competence to do good quality works, within specified time schedule and in close co-ordination with other agencies, resources committed, evaluation of technical submission etc. in addition to consideration given for competitiveness of tender price.
- 9.2 After opening the outer envelope containing the Tender, its contents shall be examined for compliance in pursuant to clause 5.0, in the presence of the TENDERERs or their authorized representatives, at scheduled time, on the Last Date of receipt of Tender Documents, who choose to be present. Tenders found not complying are liable to be rejected without further examination. The contents of envelope titled "Cover I-Technical Tender" will be opened first and its contents shall be scrutinized as per requirements of Tender documents. Only for the TENDERERs, whose contents of technical tender have been found in order and evaluated as substantially responsive, the envelope titled CoverII-"Financial Tender" shall be opened, at the same address in the presence of TENDERERs or their authorized representatives, who choose to be present at the time and date of opening of the tender. This intimation will be sent to those TENDERERs whose technical tenders are found to be in order and evaluated as substantially responsive.
- 10.3 Tenders determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer. Where there is discrepancy between the unit rates in figures and in words, the rates in words only, will govern. The amount stated in the tender will be adjusted by the Employer in accordance with the above procedure for the correction of errors.
- **10.4** The Employer reserves the right, to accept or reject any Tender or to reduce the scope / cancel the exercise without having to incur any cost or to assign any reason for its decision to any party whatsoever, and **the Employer's** decision on qualifying contractors will be final and binding on all the contractors.

Note: (*) denotes requirement of enclosure(s) along with Tender.

Date of Submission

Authorized Signature of TENDERER with Official seal

Appendix - A

LETTER OF TRANSMITTAL

Date:

To

Director(Projects)
Chennai Metro Rail Limited
Koyambedu, Depot,
Chennai - 600 107

Sir, Sub: Submission of Tender for Station Repair works and Maintenance works.

- a) I / We, having examined the details given in the Invitation to TENDERERS, we hereby submit the following information and relevant documents.
- b) I / We hereby certify that all the statements, information and data provided in the enclosed formats A to G, and accompanying statements are true and correct to the best of my / our knowledge.
- c) I / We have read the instructions appended with the qualification document and I / We understand that any contract made between ourselves and the Employer on the basis of the information given by me / us, is liable to be cancelled, if any false information is detected at a later date.
- d) I / Wehave also no objection, if enquiries are made on all the projects and works listed by me / us, in the accompanying sheets or any other enquiry, on the information furnished herewith in the accompanying sheets.
- e) I / We have furnished all information and details as asked for and have no further pertinent information to provide.
- I / We submit, the requisite certified solvency certificate and authorise the Employer to approach the Employer, to approach individuals, employers, companies, and corporation to verify my / our competency and general reputation.
- g) I / We submit in Annexure 'A' the certificates in support of my / our suitability, technical know-how and capability for having successfully completed the works during the last five years.
- h) I / We also agree that the decision of the Employer, in the Qualification and selection of Contractors will be final and binding upon me / us.
- I / We agree that the Employer reserves the right to qualify any contractor or to cancel the exercise without assigning any reason for doing so or to incur any liability to any party whatsoever.
- I / We agree not to withdraw from the contract after issue of LOA and before signing the agreement. If so, we attendere by the condition that liquidated damages shall be claimed against us by the Employer
- The following are enclosed as enclosures to the letter of transmittal: k)
 - 1. Certificate of Incorporation from Registrar of Companies
 - 2. Memorandum of Association
 - 3. Annual Report / Audited Balance Sheet & Profit and Loss Statement for the past 4 years
 - 4. Registration with Govt. Departments or Public Bodies.

- Solvency Certificate from Bankers for the value of INR 22.00 Lakhs (Twenty two lakhs only), current and dated, not earlier than 31th December 2016.
- 7. Letter of support from TENDERERs Bankers required to be enclosed in addition to the subscribers of Bankers solvency certificate for INR 22.00 Lakhs.
- 8. Income Tax Clearance certificate / Saral Form giving details of total annual contract receipts for the past five years under relevant paragraph.
- 9. Sales Tax / Works Contract Tax / VAT / PAN Registration and Clearance certificate.
- 11. Testimonials from Employers / Consultants for completion of works included in Format -D
- 12. LOI / Work Order issued by the Employers for ongoing works included in Format 'E'
- 13. Organization Chart of Company showing the Officer in-Charge who will have direct link with and control of, site organization.
- 14. Organization Chart and Curriculum Vitae of top two officers, viz, Project Manager and Coordinator.
- 16. Formats and any certificates other than that listed above.

 ${\sf I}$ / we hereby agree to abide by the decisions of **the Employer** in all matters, relating to this Qualification.

Date of Submission

Authorized Signature of TENDERER with Official Seal

QUALIFICATION REQUIREMENTS

1.	Do you satisfy requirement of Clause 5.01 a	Yes / No
2.	Do you satisfy requirement of Clause 5.01.b	Yes / No
3.	Do you satisfy requirement of Clause 5.01.c	Yes / No
4.	Do you satisfy requirement of Clause 5.01. d	Yes / No
5.	Do you satisfy requirement of Clause 5.01.e	Yes / No
6.	Do you satisfy requirement of Clause 5.01.f	Yes / No
7.	Do you satisfy requirement of Clause 5.01.g	Yes / No
8.	Do you satisfy requirement of Clause 5.02 (i)	Yes / No
9.	Do you satisfy requirement of Clause 5.02 (ii)	Yes / No
10.	Have you enclosed necessary Documentary evidence for all items Sl.No.1 to 7 above	Yes / No

Date of Submission

Authorized Signature of TENDERER with Official Seal

FORMAT – A

STRUCTURE AND ORGANISATION OF TENDERER

S.No.	Details required	To be filled by the Building Construction Company
1	Name of the TENDERER's Company	
2	Nationality of TENDERER	
3	Establishment of the Company	
	i) Year	
	ii) Location	
4.	The TENDERER is a company	Yes / No
	(Please enclose attested copy of registration / incorporation under appropriate laws of the TENDERER's country)	Enclosed
5	Address of the TENDERER :	
i)	Registered Office Address	
	Telephone Number	
	Fax Number	
	E-mail Address	
	Web site	
ii)	Local office address in India , if any:	
	Telephone Number	
	Fax Number	
	E-mail Address	
iii)	Office address through which this work will be handled and name of officer in-charge.	
	Telephone Number	
	Fax Number	
	E-mail Address	
6	If the TENDERER is a Multinational Company, please furnish the following :	
a)	Whether the foreign company has an office in India? If so, give the following details:	
	Year of Establishment	
	Location :	
	Name of the Contact Person :	

	Telephone Nos. :	
	Fax No.:	
	Email:	
b)	Please mention the nature of Indian office. If so, please provide the details whether marketing, liaison, capable of undertaking complete project in India etc.	
c)	Whether company has executed / currently executing / tender for any project in India?	
	If so, please furnish the following details:	
	Name of the Employer :	
	Name of the Project :	
	Location of the Project :	
	Nature of Project :	
	Nature of Contract :	
	Project Duration :	
	Project value :	
	Probable Date of Completion	
d)	The TENDERER has to furnish a detailed note on how it will handle the project in India, if successful TENDERER, in terms of (i) Finance,(ii) Manpower,(iii) Tools & equipment,(iv) Use of local agencies and labour, (v) Project control and management plan	
7	Details of the Board of Directors	
	i) Name of the Director	
	ii) Qualification	
	iii) Organisation	
	iv) Office address	
	v) Telephone Number	
	vi) Fax Number	
	vii) E-mail Address	

8	Enclose Company's Organisation Chart showing the structure of the organisation including the names of the Directors / Chief Executive Officer and position of Officers.	Enclosed
9	Number of years of experience and other Details.	
a.	As a Principal Contractor (Contractor shouldering major responsibility)	Yes / No
	i. In own country	Yes / No No. of Years :
	ii. Other countries (If yes, pl. specify country)	Yes / No No. of Years : Country :
10(a)	Average number of permanent employees in the last 12 months.	
	i) Managerial	Nos.
	ii) Technical	Nos.
	iii) Administration	Nos.
	iv) Financial	Nos.
	v) Quality Control and Quality Assurance Engineer	Nos.
	vi) Safety Officer	Nos.
	vii) Industrial Relations Officer	Nos.
	viii) Supervisors	Nos.
	ix) Foreman	Nos.
	x) Skilled Labours	Nos.
	xi) Un Skilled Labours	Nos.
	xiii) Others (to specify)	1. Nos.
		2. Nos. Nos.
10(b)	xii) Apprentices / Trainees	Nos.
11	i) How many years has your Company been in business of similar work under its present name & address.	Years
12	Whether registered with any Government / Public Sector Undertaking / Local bodies like CPWD / MES / PWD or equivalent applicable in the TENDERER's country.	Yes / No. 1.
	If yes, please furnish details class and type of Registration.	2.
	ii yos, piease turnisti detaiis ciass and type of Registration.	3.
13	Registration Details :	
	i) Sales Tax Registration No or equivalent applicable in the TENDERER's country & Valid upto	
	ii) PF Registration No or equivalent applicable in the TENDERER's country & Valid upto	

	iii) ESI Registration No or equivalent applicable in the TENDERER's country & Valid upto	
	iv) Service Tax registration No or equivalent applicable in the TENDERER's country & Valid upto	
14	Whether adequate and satisfactory evidence to indicate financial capacity of the organisation to undertake the said construction work is enclosed.	Yes / No
15	Do you have experience in Modern technology of manufacture and execute large span steel roof structure / concrete structure / Cast in situ or precast structure If yes, please furnish the details.	Yes / No. 1. 2. 3.
16	i) Do you have and follow Safety Manual? If yes, please give details of health and safety facilities available with you.	Yes / No Enclose Environmental Health and Safety Plan.
	ii) Was there any major, fatal accident occurred at any of your Sites during execution in the last five years? If yes, furnish Details.	Yes / No
	iii) Whether corrective action taken immediately and first-aid facilities provided in the site?	Yes / No
17	Were any penalties imposed for delays on the completion of the project? If yes, Please furnish the name of project and reasons thereof.	Yes / No. 1. Name of Project : Reasons 2. Name of Project : Reasons
18	Were there any terminations of Contracts by the Employer? If yes, please furnish the details.	Yes / No. 1. Name of Project : Reasons 2. Name of Project : Reasons
19	Litigation initiated by the Company and against the Company if any?	
	i) Whether cases of litigation proceedings have arisen in your projects during the last three financial years?	Yes / No
	ii) If Yes, How many cases of litigation arisen during the last three financial years?	Nos.
	iii) Furnish the details of the highest claim of Litigation during the last three financial years.	Rs.

	iv) If the TENDERER is a multinational company, please furnish the litigation history initiated by the Company and against the company in India, if any	
20	Details of the Banker	
	Name of the Banker	
	Contact person	
	Office Address	
	Telephone Number	
	Fax Number	
21	Are you / Firm a Recipient of any Award in appreciation of your / Firm's work? If yes, please furnish the details	Yes / No
22	Please give atleast three references of Employers (Engineers, Architects or top Officials of Organisation) for whom you may have executed construction works of importance and similar nature from whom the Employer can verify	1) Name: Designation: Company: 2) Name: Designation: Company: 3) Name: Designation: Company:
23	Any special information, which you may like to provide.	

Place : Authorized Signature of the TENDERER

Date : Common seal of the Company

Format-C

FINANCIAL INFORMATIONS

SI.No	Description	Details to be filled in by TENDERER
Α	Annual Turn over in the last five financial years (In INR)	
1	Year: 01st April 2011- 31st March 2012	
2	Year: 01st April 2012- 31st March 2013	
3	Year: 01st April 2013- 31st March 2014	
4	Year: 01st April 2014 - 31st March 2015	
5	Year : 01st April 2015 - 31st March 2016	
В	Financial Information (In INR)	
I	Year: 01st April 2011- 31st March 2012	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
II	Year: 01st April 2012- 31st March 2013	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
III	Year : 01st April 2013- 31st March 2014	
	a. Total assets	
	b. Current assets	

	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
IV	Year : 01st April 2014 - 31st March 2015	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
V	Year : 01st April 2015 - 31st March 2016	
	a. Total assets	
	b. Current assets	
	c. Total Liabilities	
	d. Current Liabilities	
	e. Profits before taxes	
	f. Profits after taxes	
	g. Net worth	
	h. Working Capital	
С	Solvency Certificate (In INR)	
	a. Name of Banker with address	
	b. Date of Certificate	
	c. Amount	
D	Credit facilities available to TENDERER -	
	Fund and non-fund based such as Cash Credit, Working capital term loans, LCs	
	and Bank Guarantees - Banker's or	
	Bankers' Letter must be produced - (In INR)	
	a. Name of Banker with address	
	b. Date of Letter of Support	

	c. Amount	
E.	TENDERER's Financial resources for this project	
	a. Own resources	
	b. Banker's or Bankers' credits	
F.	a. Approximate total value of on-going works	
	b. Total Value of works to be completed as of now	
	Note:	
	1) The TENDERER should furnish the value of work to be completed as of now along with break-up details of each work in the Proforma enclosed with this Format - C.	
	2) The TENDERER has to ensure that the list of works covered in this Proforma should be same as the ones listed in Format - E (List & details of Ongoing works) with Proforma of each work.	
G.	Anticipated total value of new works for the next financial year i.e.	

Note: Please attach SARAL Form

Place:

Date:

Authorized Signature of the TENDERER Official Seal

Format-D

<u>Details of completed works in the Last Five Years</u> (To be furnished for each Project Separately)

S.No.	Details required	To be filled by the TENDERER
1	Name of work	
2	Country and location	
3	Employer's name and address	Name:
		Address:
4	Consultants name and address.	Name :
		Address :
5	Total tendered cost of work Agreement No.	INR Millions
	Date	Agreement No: Date :
6	Total actual cost of work after completion.	INR Millions
7	Excess / less in percentage.	%
8	Explain if Excess / less is higher by 20% of the tendered cost of work.	
9	Date of commencement	
10	Period of completion	
11	Stipulated date of completion	
12	Actual date of completion	
13	Extended by the contractor, if any. Reason for non-completion of work in stipulated time limit / extended time limit, if so furnish details	Yes / No
14	Extension of time granted by the Employer, if any.	Yes / No
	If yes, please specify the reason for extension of time.	
15	Brief description of works including principal features and quantities of main items of the work.	
16	Name of Contractor's Engineer in-charge of the Project & Qualifications.	Name :Qualification :

17	Details of specialised work executed under this Contract.	
18	Details of specialised work executed by their own divisions under the Contract	
20	Whether the Programming and planning plan was followed in the form of Pert Chart adopting softwares like Primavera / MS Project?	Yes / No
21	Whether the Quality Control and Quality Assurance function was carried out? If yes, Please give details and copies of quality formats used in anyone project	Yes / No
22	Whether the safety measures was followed? If yes, Please give details.	Yes / No
23	i) Were there any labour strikes in any of your Projects, during the course of Execution of Project? If yes, Please give details.	Yes / No
	ii) Whether corrective action taken immediately?	Yes / No
24	Were there any penalties / fines / stop notice / compensation / liquidated damages imposed during execution of the project? If Yes, Please give amount, details and reason.	Yes / No Amount : Reason :
	-	
25	Whether the contract of the work was terminated? If Yes, furnish the details.	Yes / No
	,	Name of the Project :
		Reason:
26	Please specify the details of litigation / arbitration cases, if any, pertaining to works completed.	Yes / No
	If Yes, furnish the details i.e. Nature of litigation / arbitration. Please furnish whether the litigation is initiated by the Company or against the Company.	
27	Attach Employer's certificate, as may be available (Not below the rank of Director or equivalent)	Yes / No

D-4-	
Date	:

Authorized Signature of TENDERER

Place : Official Seal

Format-E

<u>Details of On-Going works</u> (To be furnished for each Project Separately)

S.No.	Details required	To Be filled by the TENDERER
1	Name of work	
2	Country and location	
3	Employer's name and address	Name :
		Address :
4	Consultants name and address.	Name :
		Address :
5	Total tendered cost of work (Agreement No. and Date)	INR Millions
6	(a) Brief description of works including principal features and quantities of main items of the work.	
7	i) Percentage of physical completion	
	ii) Amount billed for the work completed.	
	iii) Cost of work remaining to be executed as on the date of submission.	
	iv) Stipulated date of completion	
	v) Anticipated date of completion	
8	Name of Contractor's Engineer in-charge of the Project & Qualifications.	Name : Qualification :
9	Details of specialised works under this Contract	
10	Specialised works being executed by their own divisions	

11	i) Were there any labour strikes in any of your Projects, during the course of Execution? If yes, Please give details.	Yes / No
	ii) Whether corrective action taken immediately?	Yes / No
12	Were there any penalties / fines / stop-notice / compensation / liquidated damages imposed?	Yes / No Amount :
	If Yes, Please give amount, details and reason.	Reason:
13	Please specify the details of litigation / arbitration cases, if any, pertaining to works ongoing.	Yes / No
14	Attach Employer's certificate, as may be available (Not below the rank of Director or equivalent)	Yes / No

Place :	
	Authorized Signature of the TENDERER
Date :	Common seal of the Company

Format-G

<u>Details of Termination of contract by previous Employers in the past, if any</u> (To be furnished for each Project Separately, if more than one)

S.No.	Particulars	To Be filled by the TENDERER	
1	Name of works		
2	Name of the Employer		
3	Value of Contract in INR		
4	Period of Contract		
5	Terminated at what stage		
6	Reasons / grounds for termination		
7	Approx. value of work completed at the time of termination in INR		
8	Approx. value of balance work not completed in INR		
9	Remarks		

Place:	TENDERER
Date:	Common seal of the Company

Authorized Signature of the

Format 'H'

STATUS OF CURRENT LITIGATIONS, IF ANY

(To be furnished for each Project Separately, if more than one)

The TENDERER is required to disclose as part of tender submission all cases filed against the TENDERER in any Court of Law in any country. The TENDERER shall give the information in the following format in separate sheets for each litigation as applicable:

ı	General Information		
(1)	Name of the Petitioner	:	
(2)	Name of the Court in which case has been admitted.	:	
(3)	Name / designation of the Presiding Authority of the Court	•	
(4)	Date of Filing of the case and date of Admittance of the case.	:	
(5)	Expected date of next hearing	:	
(6)	Has hearing already commenced? If so, when was the last hearing?	:	
(7)	Name & Address of the TENDERER'S Counsel	:	
(8)	Name & Address of the Petitioner's Counsel		
(9)	Current status of the litigation – Whether any interim injunction or injunction award has been given. If so, give the details?	:	
(10)	Has any appeal been filed against any interim injunction or such award?	:	
(11)	Value of litigation / damages claimed / out standings and disputes, as per the Petitioner	:	
(12)	Any arrest warrant or any property attachment or any insolvency proceedings or any such decree issued against the TENDERER? Give the details.		

CHENNAI METRO RAIL LIMITED

(A JOINT VENTURE OF GOVERNMENT OF INDIA AND GOVERNMENT OF TAMILNADU)

TECHNO COMMERCIAL TENDER (TWO COVER SYSTEM)

Part 1-B-Technical Specification

The following documents shall be treated as a part of Technical specifications

- 1. Civil Specifications Volume I & II
- 2. CPWD Works Manual 2014.
- 3. CPWD Maintenance Manual 2012

As the above mentioned documents are available in the website: www.cpwd.gov.in and these documents also shall be downloaded in the following link: http://www.cpwd.gov.in/cpwdnew/Documents/cpwd_publication.aspx these items are not attached in the tender. However, all these documents should be treated as a part of tender.

PREAMBLE TO BILL OF QUANTITIES

- 1. Quoted rate is inclusive of all incidental and enabling charges such as scaffolding, ladder, lighting arrangments, etc.,
- 2. Bill of Quantities should read in conjunction with condiitons given in the General conditions of contract and Special conditions of contract
- 3. Quoted rate is inlclusive of all documentation charges such as Photographs, method statement and progress report and testing charges
- 4. Rates should be quoted taking into account the restricted working hours. Contractor shall be allowed to carry out the works only in the Non-Revenue hours if required.

	ABSTRACT				
S.No	Schedule	Quoted Amount			
1	Schedule-A: Works				
2	Schedule-B: Manpower & Machinery				
3	Schedule-C:NDSR Items				
4	Schedule-D:Items/Works not mentioned in Schedule-				
	A,B,C but mentioned in Delhi Schedule of Rates				
	2014.				
	TOTAL=				

Gross amount In Rupees:

Note: Quoted amount is inclusive of all taxes including service tax, VAT, Cess etc.,

Schedule-A- Works

Item No	DSR code	Description	unit	Qty	Rate	Amount
1	14.1	Repairs to the plaster of thickness 12mm to 20mm in patch of area 2.5 sq mt and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete including disposal of rubbish to the dumping ground within 50mtr lead.				
2	14.1.1	With cement mortar 1:4 (1 cement 4 fine sand)	sqm	1000		
3	14.53.1	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade : One or more coats on old work	sqm	1000		
4	14.54.1	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :One or more coats on old work	sqm	1000		
5	14.64.1	Finishing walls with water proofing cement paint of required shade: Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litrs/10 sqm complete including cost of Priming coat.	sqm	1000		
6	14.65.1	Finishing walls with textured exterior paint of required shade: Old work (Two or more coats on existing cement paint surface applied @ 3.28 ltr/10 sqm. sqm 125.00	sqm	1000		
7	15.56	Dismantling old plaster or skirting raking out joits and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50mtr lead.	sqm	1000		
8	15.58	Demolishing R.C.C. work by mechanical means and stockpiling at designated locations and disposal of dismantled materials up to a lead of 1 kilometre, stacking serviceable and unserviceable material separately including cutting reinforcement bars.	cum	100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
9	15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	cum	100		
10	15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	·	1000		
11	15.23.1	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	sqm	1000		
12	15.2.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	100		
13	2.1.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth upto 50 m and lift upto 1.5 m, disposed soil to be levelled and neatly dressed : All Kind of soils	sqm	5000		
14	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed:All kinds of soil		1000		
15	2.8.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m:All kinds of soil.		1000		

Item No	DSR code	Description	unit	Qty	Rate	Amount
16	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	100		
17	2.26.1	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials: All kinds of soil	cum	100		
18	2.28.1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m:All kinds of soil		5000		
19	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	sqm	5000		
20	2.32	Clearing grass and removal of the rubbish upto a distance of 50 m outside the periphery of the area cleared.	sqm	5000		
21	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level -1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)		100		
22	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for :Foundations, footings, bases for columns	sqm	1000		
23	4.6.1	Providing and fixing at or near ground level precast cement concrete in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), including the cost of required centering, shuttering complete: 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	100		
24	4.7.2	Providing and fixing up to floor five level precast cement concrete solid block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering, shuttering complete :1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
25	5.1.3	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	cum	100		
26	5.2.3	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	100		
27	5.22A.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level: Thermo-Mechanically Treated bars		10000		
28	5.26	Providing and filling in position, blown bitumen in expansion joints.	per cm depth per cm width per 100 m	100		
29	5.28	Providing and fixing in position 12 mm thick bitumen impregnated fibre board conforming to IS: 1838, including cost of primer, sealing compound in expansion joints.	n ar cm	100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
30	5.46.1	Providing and fixing of expansion joint system of approved make and manufactures for various roof locations as per approved drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum base members with, self aligning and self centering arragement support plates asper ASTM B221-02. The system shall be such that it provides watertight roof to roof/roof to corner joint cover expansion control system that is capable of accommodating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminum base member designed to accommodate various project conditions and roof treatments. The cover plate shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self-centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint System shall resists damage or deterioration from the impact of falling ice, exposure to UV, airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory requirement. Material shall confirm to ASTM 6063. Roof Joint of 100 mm gap		100		
31	6.2.1	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
32	8.3.2	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.:Granite work	metre	100		
33	8.6	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	sqm	1000		
34	8.9.1.2	Stone tile (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement complete: 8mm thick granite of any colour and shade	sqm	100		
35	8.10	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth:Granite stone of approved shade	sqm	100		
36	8.12	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineerin- Charge : a. Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	sqm	100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
37	10.6.1	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.:80x1.25 mm M.S. laths with 1.25 mm thick top cover	sqm	100		
38	10.7	Providing and fixing ball bearing for rolling shutters.	each	10		
39	10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters of all size	sqm	100		
40	10.25.2	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required:In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	10000		
41	10.28	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	1000		
42	11.41.2	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm	sqm	100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
43	13.37	White washing with lime to give an even shade	sqm	1000		
44	13.60.1	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :Two or more coats on new work	sqm	10000		
45	13.61.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :Two or more coats on new work	sqm	10000		
46	13.71	Lettering with black Japan paint of approved brand and manufacture	per Letter per cm height	100		
47	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres.	sqm	5000		
48	21.8.1	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.		1000		
49	21.16.1	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineerin-charge: Anodized (AC 15) aluminium		100		

Item No	DSR code	Description	unit	Qty	Rate	Amount
50	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineerin-Charge :With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	1000		
51	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per direction of Engineer-incharge	sqm	2000		

Item No	DSR code	Description	unit	Qty	Rate	Amount
52	16.83	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge		1000		
53	16.84	Laying old cement cocrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineerin-charge. (Old CC paver blocks shall be supplied by the department free of cost)	sqm	1000		

TOTAL=

	Schedule-B: Manpower and Machineries				
Item No	Labour/Machinery	unit	Quanity	Rate	Amount
1	Mason	day	200		
2	Carpenter	day	200		
3	Painter	day	200		
4	Fitter	day	200		
5	Technician	day	200		
6	Helper(Technician)	day	200		
7	coolie	day	200		
8	Diesel Road Roller - 8 to 10 tonne	hr	200		
9	Hydraulic Excavator (3D) with driver and fuel	hr	200		
10	Dozer D-80-A 12 with driver and fuel	hr	200		
11	Tandem Road Roller with driver and fuel	hr	200		
12	Generator 100 KVA/125 KVA with operator and fuel	hr	200		
	Hire charges of TATA 407 or equivalent for local shifting with driver and fuel	hr	200		
14	Crane upto 20T capacity with driver and fuel	hr	200		
15	15hp submersible Electrical dewatering pump with operator	hr	200		
16	40hp Diesel pump with operator and fuel	hr	200		
				TOTAL=	

	Schedule-C				
Item No		unit	Quanity	Rate	Amount
1	Supply and fixing of Dorma BB 4330, 5 Knuckle, 2 Ball bearing butt hinges size 4"X3"x3m 120 Kgs. Template drilled	Nos	100		
2	Supply and fixing ofDorma 278a with 55mm backset, 20mm square forend prepared for euro profile cylinder including strike plate and EPC 60mm Length both side key operation & Escutcheons in SSS Finish	Nos	50		
3	Supply and fixing of Dorma pull Handle TGDI-D 300 bck to back with adjustable fixing for glass, wood and metal doors in satin stainless steel. The pull handles should have supporting washer with raised bevelling on the outer surface. Length=300mm, 22mm dia with extended spindles.	Nos	50		
4	Supply and fixing of Dorma pull Handle TGDI-D 350 back to back with adjustable fixing for glass, wood and metal doors in satin stainless steel. The pull handles should have supporting washer with raised bevelling on the outer surface. Length = 350mm, 25mm dia with extended spindles.	Nos	50		
5	Supply and fixing of Dorma rack and pinion door closer TS 68 EN size 2/3/4, with std. arm and with two independent closing valves and latching spped adjustable by arm. Silver finish. As per EN 1154.	Nos	50		
6	Supply and fixing of Dorma floor sping BTS 75V EN 1-4 with std. spindle and cover plate in bottom strap 7422 for door. The floor sping with back check and adjust (not suitable for fire doors) Finish: Stain stainless steel.	Nos	50		
7	Supply and fixing of Dorma 917 Narrow stile bolt lock with 25mm backset, 24mm sq. forent, prepared for euro profile cylinder including strike plate in satin stainless steel. As per DIN 18521-2 class 3 including 70mm EPC with both sides key and oval escutcheons.	Nos	50		
8	Supply and fixing of Floor mounted Door stop:Dorma floor stop half dome with 45mm dia with fixing accessories, in satin Chrome.	Nos	50		
9	Supply and fixing of Wall mounted Door stop:Dorma 4012 wall mounted door stop dome with 60mm length with fixing accessories	Nos	50		
10	Supply and fixing of Doorma make 281 Mortise lock with out EPC	Nos	290.7		
11	Supply and fixing of Doorma EPC-70mm both side key 281 for 281 lock	Nos	20		
12	Supply anf fixing of Dorma TS 73 type Door closure with stand arm EN2-4	Nos	20		
13	Supply and fixing of Mortice shaft Dead bolt (Allen key lock)	Nos	20		
14	Supply anf fixing of PHT-05 FExternal trim lock without EPC	Nos	20		
15	Supply and fixing of euro profile half cylinder-42mm	Nos	20		
16	Servicing/easing of all fire rated doors				
16.a	Removal and replacement of Ball bearing hinges of all grades and types	Nos	20		
16.b	Removal and replacement of Mortice locks of all grades and types	Nos	20		
16.c	Removal and replacement of Heavy duty door closure of all grades and types	Nos	20		

Item No	Item Description	unit	Quanity	Rate	Amount
1	Supply and fixing of Dorma BB 4330, 5 Knuckle, 2 Ball bearing butt hinges size 4"X3"x3m 120 Kgs. Template drilled	Nos	100		
16.d	Removal and replacement of lever action flush bolt of all grade and type	Nos	20		
16.e	Removal and replacment of one point panic device of all types and grades	Nos	20		
16.f	Removal and replacment of two point panic device of all types and grades	Nos	20		
16.g	Removal and replacement of external trim of all types and grades	Nos	20		
16h	Removal and replacement of Euro profile half cylinder of all types and grades	Nos	20		
16.j	Removal and replacement of Pull handles of all grades and types	Nos	20		
17	Servicing the already fixed aluminium composite panel cladding with replacement of following fixtures (Quoted rate includes cost for scaffolding for all height)				
17.a	Replacement of Aluminium composite panel of 4mm/3mm thcik with LDPE core coloured of EURO brand/ALSTRONG make	sqm	100		
17.b	Replacement of aluminium supports with alumiminium section of 50 X 25mm X 1.5mm thick	metre	100		
17.c	Replacment of other fixtures including MS cleats, anchor fastners, double glazing tape,	Nos	100		
17.d	Removing the existing sealant and replacing the same with fresh weather sealant	Metre	100		
18	Servicing/easing of existing rolling shutters of following specifications: Motorized rolling shutter using 65mm X 25mm X 10G Guide channels for shutter width upto 3.5Mtrs and 75mm X 25mm X 10G guide channels for shutter widh above 3.5Metrs.Standard T Bottom plate, 6mm thick MS Bracket plates, shutter laths 20G for shutter widh upto 3.5 Mtrs and 18G for shutter widh above 3.5Mtrs. Fitted with JD make motor with manual switch, chain arrangments and with remote facility. Hood cover is of MS 20G.				
18.a	Removal of the existing guide channel and replacing with new one	metre	50		
18.b	Removal of the existing shutter laths and replacing with new one (For measurement and payment purpose area of replaced shutter laths only will be measured)	sqm	100		
18.c	Servicing the existing electrical motors	Nos	10		
18.d	Removal of the existing electrical motors and replacement with new electrical motor with remote facility	Nos	10		
18.e	General service covering application of greese and replacement of other miscellaneous/Minor fixtures (For bill purpose area of the actual rolling shutter will be measured)	sqm	500		
19	Surface cleaning of existing ACP, structural glass both located at all height with necessary chemicals . Quoted rate should be inclusive of necessary scaffolding/access charges	sqm	5000		
20	clearing of cobwebs at all height.Quoted rate should be inclusive of necessary scaffolding/access charges. For the measurement and payment purpose, only the portion of roof area cleaned only will be considered	sqm	5000		
21	Supply and fixing of 10mm thick tac tile including band in public area matching with the exisiting pattern of approved size and quality laid on bed of cement mortar 1:3 mix, flush pointing with white cement using colour pigment. Pattern covers stripes/Dot in Durato	sqm	500		

Item No	Item Description	unit	Quanity	Rate	Amount
1	Supply and fixing of Dorma BB 4330, 5 Knuckle, 2 Ball bearing butt hinges size 4"X3"x3m 120 Kgs. Template drilled	Nos	100		
1 77	Supply and fixing of polycarbonate sheets confirming to IS 14443 with necessary fixtures and appropriate support system. (Support system will paid under separate item)	sqm	500		
23	Servicing of Metal false ceiling of 600mm wide and 600mm long manufactured of 0.5mm thick Galvanized steel perforated 2.5mm dia 5.5mm C/C and similar varieties.				
	Labour charges for removing and refixing of metal false ceiling panels for maintenance purpose; quoted rate should be inclusive of all supplemental works including scaffolding etc., .Item will be paid based on the No of panels removed and refixed	Nos	100		
23.b	Removal and replacement of clip in profile of GI make of 0.5mm thick. Item will be paid based on the No of panels for which replacement has been done	Nos	100		
23.c	IRAMOVALANG PANACAMANT OT FIGIG SUSPANSION SVSTAM OT 4MM (-) ROG NOIG ON CIAMN WITH CIIN ITAMI	Nos	100		
- 7/1	Cleaning and removal of blockages in saucer drain with necessary manpower and equipment. Work includes removal and refixing of granite/Stainless steel cover slab without causing damage any to the adjacent granite/tile works. For Billing, length of the saucer drain cleaned will be measured	metre	500		

Item No	Item Description	unit	Quanity	Rate	Amount
1	Supply and fixing of Dorma BB 4330, 5 Knuckle, 2 Ball bearing butt hinges size 4"X3"x3m 120 Kgs. Template drilled	Nos	100		
25	ii) 50 mm deep (50mm deep is maximum) Aluminium modular system with anodized finish of AO01250/AO 6037 or equivalent of 250mm mill finish complete. Sign box including channel supports are to be anodised coated to match the colour as per drawing, document and guideline. Front facia, pictograms and its panels(graphics) to be made up of 4mm thick 040 acrylic decorated with 3M block out vinyl and approved colour 3M cast vinyl design electro cut and pasted on it. Internally illuminated by using LED module of GE tetra mini max/ Equivalent (minimum 50000 hours usage period warrenty is must for lighting) with 140 degree viewing angle. ii)50 mm deep (50mm deep is maximum)Aluminium modular system with anodized finish of AO01250/AO 6037 or equivalent of 250mm mill finish complete. Sign box including channel supports are to be anodised coated to match the colour as per drawing, document and guideline. Front facia, pictograms & its panel (graphics) to be made up of 4mm thick ACP decorated with approved colour 3M cast Retro Reflective vinyl, design electro cut and pasted on it. iii)Supplying and fixing sign box 50 mm deep (50mm deep is maximum) of Aluminium modular system with anodized finish of AO01250/AO 6037 or equivalent of 250mm mill finish complete. Sign box including channel supports are to be anodised coated to match the colour as per drawing, document and guideline. Front facia, pictograms and its panel (graphics) to be made up of 4mm thick 040 acrylic decorated with 3M block out vinyl and approved colour 3M cast vinyl design electro cut and pasted on it. iii)Supply and fixing of the signage made up of Stainless steel 304 grade brush finish of 16 gauge, content and text chemical etched, approved colour painted on it. Fixed with key hole type fixing at site.				
25.a	Removal and replacement of aluminium modular system and support system of above specifications	kg	100		
25.b	Removal and replacement of 4mm thick 040 acrylic board	sqm	50		
25.c	Removal and replacement of 3M block out vinyl	sqm	50		
25.d	Removal and replacement of electro cut 3M cast vinyl of approved colour	sqm	50		
25.e	Removal and replacement of LED module of GE tetra mini max/ Equivalent (minimum 50000 hours usage period warrenty is must for lighting) with 140 degree viewing angle.	sqm	50		

Item No	Item Description	unit	Quanity	Rate	Amount
1	Supply and fixing of Dorma BB 4330, 5 Knuckle, 2 Ball bearing butt hinges size 4"X3"x3m 120 Kgs. Template drilled	Nos	100		
25.f	Removal and replacement of 4mm thick ACP	sqm	50		
25.g	Removal and replacement of design electro cut of 3M cast Retro Reflective vinyl	sqm	50		
25.h	Removal and replacement of the signage made up of Stainless steel 304 grade brush finish of 16 gauge, content and text chemical etched, approved colour painted on it. Fixed with key hole type fixing at site.		50		
				TOTAL=	

Schedule-D				
Item No	Item Description	Amount	% quoted above/below	Amount
1	Items/Works not mentioned in Schedule-A,B,C but mentioned in Delhi Schedule of Rates 2014.	5000000		

Note:Quoted % will be directly applied on the rates given in the DSR. No co-efficient/conversion factors will be considered

General Conditions of contract

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CHENNAI METRO RAIL LIMITED

SELECTION OF TENDERER FOR Station repair works and maintenance works

SECTION VII GENERAL CONDITIONS OF CONTRACT

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General Conditions

1. General Provisions

Definitions

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

1.1.1. The Contract

- 1.1.1.1 "Contract" means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Employer's Requirements, the Schedules, the Contractor's Proposal, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.
- 1.1.1.2 "Contract Agreement" means the contract agreement (if any) referred to in Sub-Clause 1.6 [Contract Agreement].
- 1.1.1.3 "Letter of Acceptance" means the letter of formal acceptance, signed by the Employer, of the Letter of Tender, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.1.4 "Letter of Tender" means the document entitled letter of tender or letter of bid, which was completed by the Contractor and includes the signed offer to the Employer for the Works.
- 1.1.1.5 "Employer's Requirements" means the document entitled employer's requirements, as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the Works.
- 1.1.1.6 "Schedules" means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include data, lists and schedules of payments and/or prices.
- 1.1.1.7 "Contractor's Proposal" means the document entitled proposal, which the Contractor submitted with the Letter of Tender, as included in the Contract. Such document may include the Contractor's preliminary design.
- 1.1.1.8 "Tender" means the Letter of Tender and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.

- 1.1.1.9 "Contract Data" means the pages completed by the Employer entitled contract data which constitute Part A of the Particular Conditions
- 1.1.1.10 "Schedule of Guarantees" and "Schedule of Payments" mean the documents so named (if any) which are comprised in the Schedules.

1.1.2. Parties and Persons

- 1.1.2.1 "Party" means the Employer or the Contractor, as the context requires.
- 1.1.2.2 "Employer" means the person named as employer in the Contract Data and the legal successors in title to this person.
- 1.1.2.3 "Contractor" means the person(s) named as contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person(s).
- 1.1.2.4 "Engineer" means the person appointed by the Employer to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.4 [Replacement of the Engineer].
- 1.1.2.5 "Contractor's Representative" means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.
- 1.1.2.6 "Employer's Personnel" means the Engineer, the assistants referred to in Sub-Clause 3.2 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel.
- 1.1.2.7 Contractor's Personnel" means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.
- 1.1.2.8 "Subcontractor" means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.2.9 "DB" means the person or three persons appointed under Sub-Clause 20.2 [Appointment of the Dispute Board] or Sub-Clause 20.3 [Failure to Agree on the Composition of the Dispute Board].
- 1.1.2.11 "Bank" means the financing institution (if any) named in the Contract Data.
- 1.1.2.12 "Borrower" means the person (if any) named as the borrower in the Contract Data.

1.1.3. Dates, Tests, Periods

- 1.1.3.1 "Base Date" means the date 28 days prior to the latest date for submission and Completion of the Tender.
- 1.1.3.2 "Commencement Date" means the date notified under Sub-Clause 8.1 [Commencement of Works].
- 1.1.3.3 "Time for Completion" means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Contract Data (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.
- 1.1.3.4 "Tests on Completion" means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.5 "Taking-Over Certificate" means a certificate issued under Clause 10 [Employer's Taking Over].
- 1.1.3.6 "Tests after Completion" means the tests (if any) which are specified in the Contract and which are carried out under Clause 12 [Tests after Completion] after the Works or a Section (as the case may be) are taken over by the Employer.
- 1.1.3.7 "Defects Notification Period" means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], as stated in the Contract Data (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].
- 1.1.3.8 "Performance Certificate" means the certificate issued under Sub-Clause 11.9 [Performance Certificate].
- 1.1.3.9 "day" means a calendar day and "year" means 365 days.

1.1.4. Money and Payments

- 1.1.4.1 "Accepted Contract Amount" means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
- 1.1.4.2 "Contract Price" means the price defined in Sub-Clause 14.1 [The Contract Price], and includes adjustments in accordance with the Contract.
- 1.1.4.3 "Cost" means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges,

but does not include profit.

- 1.1.4.4 "Final Payment Certificate" means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].
- 1.1.4.5 "Final Statement" means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].
- 1.1.4.6 "Foreign Currency" means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.
- 1.1.4.7 "Interim Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.
- 1.1.4.8 "Local Currency" means the currency of the Country.
- 1.1.4.9 "Payment Certificate" means a payment certificate issued under Clause 14 [Contract Price and Payment].
- 1.1.4.10 "Provisional Sum" means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].
- 1.1.4.11 "Retention Money" means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].
- 1.1.4.12 "Statement" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

1.1.5. Works and Goods

- 1.1.5.1 "Contractor's Equipment" means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.5.2 "Goods" means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.
- 1.1.5.3 "Materials" means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.
- 1.1.5.4 "Permanent Works" means the permanent works to be executed by the Contractor under the Contract.
- 1.1.5.5 "Plant" means the apparatus, machinery and vehicles intended to form or

- forming part of the Permanent Works, including vehicles purchased for the Employer and relating to the construction or operation of the Works.
- 1.1.5.6 "Section" means a part of the Works specified in the Contract Data as a Section (if any).
- 1.1.5.7 "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.
- 1.1.5.8 "Works" mean the Permanent Works and the Temporary Works, or either of them as appropriate.
- 1.1.6 Other Definitions
- 1.1.6.1 "Contractor's Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract; as described in Sub-Clause 5.2 [Contractor's Documents].
- 1.1.6.2 "Country" means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.
- 1.1.6.3 "Employer's Equipment" means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Employer's Requirements; but does not include Plant which has not been taken over by the Employer.
- 1.1.6.4 "Force Majeure" is defined in Clause 19 [Force Majeure].
- 1.1.6.5 "Laws" means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.
- 1.1.6.6 "Performance Security" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].
- 1.1.6.7 "Site" means the places where the Permanent Works are to be executed, including storage and working areas, and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.
- 1.1.6.8 "Unforeseeable" means not reasonably foreseeable by an experienced contractor by the Base Date.
- 1.1.6.9 "Variation" means any change to the Employer's Requirements or the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].
- 1.1.6.10 "Notice of Dissatisfaction" means the notice given by either Party to the other under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] indicating its

dissatisfaction and intention to commence arbitration.

1.2 Interpretation

In the Contract, except where the context requires otherwise:

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

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

In these conditions, provisions including the expressions "Cost plus profit" require this profit to be one-twentieth (5%) of this Cost unless otherwise indicated in the Contract Data.

1.3 Communications

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

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and
- (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Data. However:
 - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
 - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.
- (c) Communication in respect of Clauses 15, 16 and 20 shall be sent by Indian speed post, any correspondence collected by the authorized representative of the contractor in person.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

1.4 Law and Language

The Contract shall be governed by the law of the country (or other jurisdiction) stated in the Contract Data.

The ruling language for communications shall be that stated in the Contract Data.

The language for communications shall be that stated in the Contract Data. If no language is stated there, the language for communications shall be the ruling language of the Contract

1.5 Priority of Documents

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

- (a) the Contract Agreement (if any),
- (b) the Letter of Acceptance,
- (c) the Letter of Tender,
- (d) the Particular Conditions, -Part A (Contract Data),
- (e) the Particular Conditions Part B (Specific Provisions),
- (f) the General Conditions,
- (g) the Employer's Requirements,
- (h) the Schedules, and
- the Contractor's Proposal and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless the Particular Conditions establish otherwise. The Contract Agreement shall be based upon the form annexed to the Particular Conditions. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

1.7 Assignment

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

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

1.8 Care and Supply of Documents

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

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

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

1.9 Errors in the Employer's Requirements

If the Contractor suffers delay and/or incurs Cost as a result of an error in the Employer's Requirements, and an experienced contractor exercising due care would not have discovered the error when scrutinising the Employer's Requirements under Sub-Clause 5.1 [General Design Obligations], the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

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

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

1.10 Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free license to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This

license shall:

- (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

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

1.11 Contractor's Use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.12 Confidential Details

The Contractor's and the Employer's Personnel shall disclose all such confidential and other information as may be reasonably required in order to verify compliance with the Contract and allow its proper implementation.

Each of them shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out their respective obligations under the Contract or to comply with applicable Laws. Each of them shall not publish or disclose any particulars of the Works prepared by the other Party without the previous agreement of the other Party. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Particular Conditions:

(a) the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the Employer's Requirements as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and

(b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the design, execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so, unless the Contractor is impeded to accomplish these actions and shows evidence of its diligence.

However, the Contractor shall submit, in good time, the details of Goods to the Employer, who shall then promptly obtain all import permits or licences required for these Goods.

The Employer shall also obtain or grant all consents including permits-to-work, rights-of-way and approvals required for the Works.

1.14 Joint Several Liability

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

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

2. The Employer

2.1 Right of Access to the Site

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

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

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

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

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

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

2.2 Permits, Licenses or Approvals

The Employer shall provide, at the request of the Contractor, such reasonable assistance as to allow the Contractor to obtain properly:

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

2.3 Employer's Personnel

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

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

2.4 Employer's Financial Arrangements

Deleted

2.5 Employer's Claims

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

The notice shall be given as soon as practicable and no longer than 28 days after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

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

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

3. The Engineer

3.1 Engineer's Duties and Authority

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

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer shall promptly inform the Contractor of any change to the authority attributed to the Engineer.

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

Except as otherwise stated in these Conditions:

- (a) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer;
- (b) the Engineer has no authority to relieve either Party of any duties, obligations or responsibilities under the Contract; and
- (c) any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.
- (d) any act by the Engineer in response to a Contractor's request except as otherwise expressly specified shall be notified in writing to the Contractor within 28 days of receipt.

The following provision shall apply:

The Engineer shall obtain the specific approval of the Employer before taking action under the following Sub-Clause of these Conditions:

- (A) DELETED.
- (B) Sub-Clause 13.1: instructing a Variation, except;
 - (i) in an emergency situation as determined by the Engineer, or
 - (ii) if such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Contract Data.
- (C) Sub-Clause 13.3: approving a proposal for Variation submitted by the Contractor in accordance with Sub-Clause 13.1 or 13.2.
- (D) Sub-Clause 13.4: specifying the amount payable in each of the applicable currencies.

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 responsibility 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 13 [Variations and Adjustments] and shall notify the Contractor accordingly, with a copy to the Employer.

3.2 Delegation by the Engineer

The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident

engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

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

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

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

3.3 Instructions of the Engineer

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

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

3.4 Replacement of the Engineer

If the Employer intends to replace the Engineer, the Employer shall, not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the intended replacement Engineer.

3.5 Determinations

Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer

shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars, within 28 days from the receipt of the corresponding claim or request except when otherwise specified. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

3.6 Management Meetings

The Engineer or the Contractor's Representative may require the other to attend a management meeting in order to review the arrangements for future work. The Engineer shall record the business of management meetings and supply copies of the record to those attending the meeting and to the Employer. In the record, responsibilities for any actions to be taken shall be in accordance with the Contract.

4. The Contractor

4.1 Contractor's General Obligations

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

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

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

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

The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer

4.2 Performance Security

The Contractor shall obtain (at his cost) a Performance Security for proper performance,

in the amount stated in the Contract Data and denominated in the currency(ies) of the Contract or in a freely convertible currency acceptable to the Employer. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by a reputable Public sector bank or financial institution selected by the Contractor, and shall be in the form annexed to the Particular Conditions, as stipulated by the Employer, or in another form approved by the Employer.

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

The Employer shall not make a claim under the Performance Security, except for amounts to which the Employer is entitled under the Contract.

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

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

Without limitation to the provisions of the rest of this Sub-Clause, whenever the Engineer determines an addition or a reduction to the Contract Price as a result of a change in cost and/or legislation, or as a result of a Variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly increase, or may decrease, as the case may be, the value of the Performance Security in that currency by an equal percentage.

4.3 Contractor's Representative

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

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked in terms of Sub-Clause 6.9 [Contractor's Personnel], or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

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

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

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

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

The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

4.4 Subcontractors

The Contractor shall not subcontract the whole of the Works.

The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor. Unless otherwise stated in the Particular Conditions:

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

The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.

Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.

4.5 Nominated Subcontractors

In this Sub-Clause, "nominated Subcontractor" means a Subcontractor whom the Engineer, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor. The Contractor shall not be under any obligation to employ a

nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars.

4.6 Co-operation

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

- (a) the Employer's Personnel,
- (b) any other contractors employed by the Employer, and
- (c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not included in the Contract.

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

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

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

4.7 Setting Out

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

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

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

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

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

4.8 Safety Procedures

The Contractor shall:

- (a) comply with all applicable safety regulations,
- (b) take care for the safety of all persons entitled to be on the Site,
- (c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,
- (d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Employer's Taking Over], and
- (e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.
- (f) work towards closure of Non Conformance Report periodically in various categories of high risk, medium risk and low risk. Failure to comply with the closing of NCR's will attract penalty as mentioned in Particular Condtions of Contract.

4.9 Quality Assurance

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

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

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

4.10 Site Data

The Employer shall have made available to the Contractor for his information, prior to

the Base Date, all relevant data in the Employer's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which come into the

Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

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

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

4.11 Sufficiency of the Accepted Contract Amount

The Contractor shall be deemed to:

- (a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and
- (b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data] and any further data relevant to the Contractor's design.

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper design, execution and completion of the Works and the remedying of any defects.

4.12 Unforeseeable Physical Conditions

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site

when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

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

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

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

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

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

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

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

4.13 Rights of Way and Facilities

Unless otherwise specified in the Contract the Employer shall provide effective access to and possession of the Site including special and/or temporary rights-of-way which are necessary for the Works. The Contractor shall obtain, at his risk and cost, any additional

rights of way or facilities outside the Site which he may require for the purposes of the Works.

4.14 Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

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

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

4.15 Access Route

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

Except as otherwise stated in these Conditions:

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

4.16 Transport of Goods

Unless otherwise stated in the Particular Conditions

(a) the Contractor shall give the Engineer not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;

- (b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and
- (c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.
- (d) the Contractor shall request the Engineer's permission to deliver any item or Goods to the Site. No Goods shall be delivered without this permission, which shall not relieve the Contractor from any obligation.

4.17 Contractor's Equipment

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

4.18 Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values indicated in the Employer's Requirements or prescribed by applicable Laws.

4.19 Electricity, Water and Gas

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require for his construction activities and to the extent defined in the Employer's Requirements, for the tests.

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

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

4.20 Employer's Equipment and Free-Issue Material

The Employer shall make the Employer's Equipment (if any) available for the use of the Contractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Employer's Requirements. Unless otherwise stated in the Employer's Requirements:

- (a) the Employer shall be responsible for the Employer's Equipment, except that
- (b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Employer's Requirements. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Engineer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.

After this visual inspection, the free-issue materials shall come under the care, custody and control of the Contractor. The Contractor's obligations of inspection, care, custody and control shall not relieve the Employer of liability for any shortage, defect or default not apparent from a visual inspection.

4.21 Progress Reports

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

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

Each report shall include:

- (a) charts and detailed descriptions of progress, including each stage of design, Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection, testing, commissioning and trial operation;
- (b) photographs showing the status of manufacture and of progress on the Site;
- (c) for the manufacture of each main item of Plant and Materials, the name of the

manufacturer, manufacture location, percentage progress, and the actual or expected dates of:

- (i) commencement of manufacture,
- (ii) Contractor's inspections,
- (iii) tests, and
- (iv) shipment and arrival at the Site;
- (d) the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- (e) copies of quality assurance documents, test results and certificates of Materials;
- (f) list of Variations, notices given under Sub-Clause 2.5 [Employer's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- (g) safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- (h) comparisons of actual and planned progress, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.22 Security of the Site

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and
- (b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site.

4.23 Contractor's Operations on Site

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

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

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all

Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfil obligations under the Contract.

4.24 Fossils

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

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

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

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

5. Design

5.1 General Design Obligations

The DDC for the work will supply all Good for Construction Drawings to the Contractor from time to time as per construction schedule. Based on the GFC drawings the contractor has to prepare Shop drawings.

The Design validation of DDC's drawings based on the constructability point of view has to be considered by the contractor and any changes if required has to be notified to the DDC, who will change the drawing accordingly.

5.2 Contractor's Documents

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

The Contractor shall prepare all Contractor's Documents, and shall also prepare any

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

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

Unless otherwise stated in the Employer's Requirements, each review period shall not exceed 21 days, calculated from the date on which the Engineer receives a Contractor's Document and the Contractor's notice. This notice shall state that the Contractor's Document is considered ready, both for review (and approval, if so specified) in accordance with this Sub-Clause and for use. The notice shall also state that the Contractor's Document complies with the Contract, or the extent to which it does not comply.

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

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

- (a) in the case of a Contractor's Document which has (as specified) been submitted for the Engineer's approval:
 - (i) the Engineer shall give notice to the Contractor that the Contractor's Document is approved, with or without comments, or that it fails (to the extent stated) to comply with the Contract;
 - (ii) execution of such part of the Works shall not commence until the Engineer has approved the Contractor's Document; and
 - (iii) the Engineer shall be deemed to have approved the Contractor's Document upon the expiry of the review periods for all the Contractor's Documents which are relevant to the design and execution of such part, unless the Engineer has previously notified otherwise in accordance with sub-paragraph (i);
- (b) execution of such part of the Works shall not commence prior to the expiry of the review periods for all the Contractor's Documents which are relevant to its design and execution;
- (c) execution of such part of the Works shall be in accordance with these reviewed (and, if specified, approved) Contractor's Documents; and

(d) if the Contractor wishes to modify any design or document which has previously been submitted for review (and, if specified, approval), the Contractor shall immediately give notice to the Engineer. Thereafter, the Contractor shall submit revised documents to the Engineer in accordance with the above procedure.

If the Engineer instructs that further Contractor's Documents are required, the Contractor shall prepare them promptly. Any such approval or consent, or any review (under this Sub-Clause or otherwise), shall not relieve the Contractor from any obligation or responsibility

5.3 Contractor's Undertaking

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

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

5.4 Technical Standards and Regulations

The design, the Contractor's Documents, the execution and the completed Works shall comply with the Country's technical standards, building, construction and environmental Laws, Laws applicable to the product being produced from the Works, and other standards specified in the Employer's Requirements, applicable to the Works, or defined by the applicable Laws.

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

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

- (a) the Engineer determines that compliance is required, and
- (b) the proposals for compliance constitute a variation,

then the Engineer shall initiate a Variation in accordance with Clause 13 [Variations and Adjustments].

5.5 Training

The Contractor shall carry out the training of Employer's Personnel in the operation and maintenance of the Works to the extent specified in the Employer's Requirements. If the Contract specifies training which is to be carried out before taking-over, the Works shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until this training has been completed.

5.6 As-Built Documents

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

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

5.7 Design Error

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

6. Staff and Labour

6.1 Engagement of Labour

Except as otherwise stated in the Employer's Requirements, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, feeding, transport and, when appropriate, housing.

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour with appropriate qualifications and experience from sources within the Country.

6.2 Rates of Wages and Conditions of Labour

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of the Country for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

6.3 Persons in the Service

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

6.4 Labour Laws

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

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

6.5 Working Hours

No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours stated in the Contract Data, unless:

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

6.6 Facilities for Staff and Labour

Except as otherwise stated in the Employer's Requirements, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Employer's Requirements.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

6.7 Health and Safety

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

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective

measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

HIV-AIDS Prevention. The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor's employees, all Subcontractors and any other Contractor's or Employer's personnel, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to, of Sexually Transmitted Diseases (STD) -or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labour as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS programme, (unless otherwise agreed) of all Site staff and labour.

The Contractor shall include in the programme to be submitted for the execution of the Works under Sub-Clause 8.3 an alleviation programme for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation programme shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the programme shall detail the resources to be provided or utilised and any related sub-contracting proposed. The programme shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation this programme shall not exceed the Provisional Sum dedicated for this purpose.

6.8 Contractor's Superintendence

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

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

6.9 Contractor's Personnel

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

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

If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and Equipment

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

6.11 Disorderly Conduct

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

6.12 Foreign Personnel

The Contractor may bring in to the Country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, if requested by the Contractor, use his best endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.

The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial.

6.13 Supply of Food stuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Employer's Requirements at reasonable prices for the Contractor's Personnel for the purpose of or in connection with the Contract.

6.14 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

6.15 Measures against Insect and Pest Nuisance

The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall employ with all the regulations of the local health authorities, including use of appropriate insecticides.

6.16 Alcoholic Liquor or Drugs

The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal thereto by Contractor's Personnel.

6.17 Arms and Ammunition

The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms, or ammunition of any kind, or allow Contractor's Personnel to do so.

6.18 Festivals and Religious Customs

The Contractor shall respect the Country's recognized festivals, days, of rest and religious or other customs.

6.19 Funeral Arrangements

The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Work.

6.20 Forced Labour

The Contractor shall not employ "forced or compulsory labour" in any form. "Forced or compulsory labour" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

6.21 Child Labour

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where the relevant labour laws of the Country have provisions for employment of minors,

the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work.

6.22 Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and submitted to the Engineer, and these records shall be available for inspection by Auditors during normal working hours. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

6.23 Worker's Organizations

In countries where the relevant labour laws recognize worker's rights to form and to join workers' organizations of their choosing without interference and to bargain collectively, the Contractor shall comply with such laws. Where the relevant labour laws substantially restrict workers' organizations, the Contractor shall enable alternative means for the Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. In either case described above, and where the relevant labour laws are silent, the Contractor shall not discourage the Contractor's Personnel from forming or joining workers' organizations of their choosing or from bargaining collectively, and shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organizations and bargain collectively. The Contractor shall engage with such workers' representatives. Workers' organizations are expected to fairly represent the workers in the workforce.

6.24 Non-Discrimination and Equal Opportunity

The Contractor shall not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment relationship on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. In countries where the relevant labour laws provide for non-discrimination in employment, the Contractor shall comply with such laws. When the relevant labour laws are silent on nondiscrimination in employment, the Contractor shall meet this Sub-Clause's requirements. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination.

7. Plant, Materials and Workmanship

7.1 Manner of Execution

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

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

7.2 Samples

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

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

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

7.3 Inspection

The Employer's Personnel shall at all reasonable times:

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

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

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

7.4 Testing

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

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

The Engineer may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

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

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

7.5 Rejection

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

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

7.6 Remedial Work

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

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

because of an accident, unforeseeable event or otherwise.

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

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

7.7 Ownership of Plant and Materials

Except otherwise specified in the Contract, each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

- (a) when it is incorporated in the Works;
- (b) when the Contractor is paid the corresponding value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension]".

7.8 Royalties

Unless otherwise stated in the Employer's Requirements, the Contractor shall pay all royalties, rents and other payments for:

- (a) natural Materials obtained from outside the Site, and
- (b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.

8. Commencement, Delays and Suspension

8.1 Commencement of Work

Except otherwise specified in the Particular Conditions, the Commencement Date shall be the date at which the following precedent conditions have all been fulfilled and the Engineer's instruction recording the agreement of both Parties on such fulfilment and instructing to commence the Works is received by the Contractor:

- (a) signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities in the Country;
- (b) delivery to the Contractor of reasonable evidence of the Employer's Financial arrangements (under Sub-Clause 2.4 [Employer's Financial Arrangements])
- (c) except if otherwise specified in the Contract Data, effective access to and possession of the Site given to the Contractor together with such permission(s)under (a) of Sub-Clause 1.13 [Compliance with Laws] as required

for the commencement of the Works; and

(d) receipt by the Contractor of the Advance Payment under Sub-Clause 14.2 [Advance Payment] provided that the corresponding bank guarantee has been delivered by the Contractor.

If the said Engineer's instruction is not received by the Contractor within 180 days from his receipt of the Letter of Acceptance, the Contractor shall be entitled to terminate the Contract under Sub-Clause 16.2 [Termination by Contractor].

The Contractor shall commence the design and execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.

8.2 Completion

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

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

8.3 Programme

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

- (a) The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design, Contractor's Documents, procurement, manufacture, inspection, delivery to Site, construction, erection, testing, commissioning and trial operation,
- (b) the periods for reviews under Sub-Clause 5.2 [Contractor's Documents] and for any other submissions, approvals and consents specified in the Employer's Requirements,
- (c) the sequence and timing of inspections and tests specified in the Contract, and
- (d) a supporting report which includes:
 - (i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and
 - (ii) details showing the Contractor's reasonable estimate of the number of each

class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

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

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

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

8.4 Extension of Time for Completion

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

- (a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]),
- (b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,
- (c) exceptionally adverse climatic conditions,
- (d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or
- (e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors.

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

8.5 Delays Caused by Authorities

If the following conditions apply, namely:

- (a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,
- (b) these authorities delay or disrupt the Contractor's work, and
- (c) the delay or disruption was Unforeseeable,

then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

8.6 Rate of Progress

If, at any time:

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

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

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

Additional costs of revised methods, including acceleration measures, instructed by the Engineer to reduce delays resulting from causes listed under Sub-Clause 8.4 [Extension of Time for Completion] shall be paid by the Employer, without generating, however, any other additional payment benefit to the Contractor.

8.7 Delay Damages

If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to notice under Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.

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

8.8 Suspension of Work

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

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

8.9 Consequences of Suspension

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

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

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

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

8.10 Payment for Plant and Materials in Event of Suspension

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

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

8.11 Prolonged Suspension

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Engineer's permission to proceed. If the Engineer does not give permission within 28 days after being requested to do so, the Contractor

may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.12 Resumption of Work

After the permission or instruction to proceed is given, the Contractor and the Engineer shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension after receiving from the Engineer an instruction to this effect under Clause 13 [Variations and Adjustments].

9. Tests on Completion

9.1 Contractor's Obligations

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with Sub-Clause 5.6 [As-Built Documents] and Sub-Clause 5.7 [Operation and Maintenance Manuals].

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

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

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

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

Trial operation shall not constitute a taking-over under Clause 10 [Employer's Taking

Over]. Unless otherwise stated in the Particular Conditions, any product produced by the Works during trial operation shall be the property of the Employer.

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

9.2 Delayed Tests

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

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

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

9.3 Retesting

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

9.4 Failure to Pass Tests on Completion

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

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

In the event of sub-paragraph (c), the Contractor shall then proceed in accordance with all

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

10. Employer's Taking Over

10.1 Taking Over of the Works and Sections

Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Employer when (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2

[Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

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

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

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

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

10.2 Taking Over of Parts of the Works

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

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

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

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

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

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

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

10.3 Interference with Tests Completion

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

The Engineer shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Engineer shall require the Tests on Completion to

be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

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

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

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

10.4 Surfaces Requiring Reinstatement

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

11. Defects Liability

11.1 Completion of Outstanding Work and Remedying Defects

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

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

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

11.2 Cost of Remedying Defects

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

(a) the design of the Works, other than a part of the design for which the Employer is

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

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

11.3 Extension of Defects Notification Period

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

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

11.4 Failure to Remedy Defects

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

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

- (a) carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;
- (b) require the Engineer to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or
- (c) if the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case

may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5 Removal of Defective Work

If the defect or damage cannot be remedied expeditiously on the Site and the Employer gives consent, the Contractor may remove from the Site for the purposes of repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

11.6 Further Tests

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

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

11.7 Right of Access

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

11.8 Contractor to Search

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

11.9 Performance Certificate

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

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

the Employer.

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

11.10 Unfulfilled Obligations

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

11.11 Clearance of Site

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

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

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

12. Test after Completion

12.1 Procedure for Tests after Completion

If Tests after Completion are specified in the Contract, this Clause shall apply. Unless otherwise stated in the Particular Conditions, the Employer shall:

- (a) provide all electricity, equipment, fuel, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the Tests after Completion efficiently, and
- (b) carry out the Tests after Completion in accordance with the manuals supplied by the Contractor under Sub-Clause 5.7 [Operation and Maintenance Manuals] and such guidance as the Contractor may be required to give during the course of these Tests; and in the presence of such Contractor's Personnel as either Party may reasonably request.

The Tests after Completion shall be carried out as soon as is reasonably practicable after the Works or Section have been taken over by the Employer. The Employer shall give to the Contractor 21 days' notice of the date after which the Tests after Completion will be carried out. Unless otherwise agreed, these Tests shall be carried out within 14 days after this date, on the day or days determined by the Employer.

If the Contractor does not attend at the time and place agreed, the Employer may proceed with the Tests after Completion, which shall be deemed to have been made in the Contractor's presence, and the Contractor shall accept the readings as accurate.

The results of the Tests after Completion shall be compiled and evaluated by both Parties. Appropriate account shall be taken of the effect of the Employer's prior use of the Works.

12.2 Delayed Tests

If the Contractor incurs Cost as a result of any unreasonable delay by the Employer to the Tests after Completion, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause

20.1 [Contractor's Claims] to payment of any such

Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost and profit.

If, for reasons not attributable to the Contractor, a Test after Completion on the Works or any Section cannot be completed during the Defects Notification Period (or any other period agreed upon by both Parties), then the Works or Section shall be deemed to have passed this Test after Completion.

12.3 Retesting

If the Works, or a Section, fail to pass the Tests after Completion:

- (a) sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall apply, and
- (b) either Party may then require the failed Tests, and the Tests after Completion on any related work, to be repeated under the same terms and conditions.

If and to the extent that this failure and retesting are attributable to any of the matters listed in subparagraphs (a) to (d) of Sub-Clause 11.2 [Cost of Remedying Defects] and cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer.

12.4 Failure to Pass Tests after Completion

If the following conditions apply, namely:

- (a) the Works, or a Section, fail to pass any or all of the Tests after Completion,
- (b) the relevant sum payable as non-performance damages for this failure is stated (or its method of calculation is defined) in the Contract, and
- (c) the Contractor pays this relevant sum to the Employer during the Defects Notification Period.

then the Works or Section shall be deemed to have passed these Tests after Completion.

If the Works, or a Section, fail to pass a Test after Completion and the Contractor proposes to make adjustments or modifications to the Works or such Section, the Contractor may be instructed by (or on behalf of) the Employer that right of access to the Works or Section cannot be given until a time that is convenient to the Employer. The Contractor shall then remain liable to carry out the adjustments or modifications and to satisfy this Test, within a reasonable period of receiving notice by (or on behalf of) the Employer of the time that is convenient to the Employer. However, if the Contractor does not receive this notice during the relevant Defects Notification Period, the Contractor shall be relieved of this obligation and the Works or Section (as the case may be) shall be deemed to have passed this Test after Completion.

If the Contractor incurs additional Cost as a result of any unreasonable delay by the Employer in permitting access to the Works or Plant by the Contractor, either to investigate the causes of a failure to pass a Test after Completion or to carry out any adjustments or modifications, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost and profit.

13. Variations and Adjustments

13.1 Right to Vary

Variations may be initiated by the Engineer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by a request for the Contractor to submit a proposal.

The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that:

- (i) the Contractor cannot readily obtain the Goods required for the Variation.
- (ii) such Variation triggers a substantial change in the sequence or progress of the Works.
- (iii) it will reduce the safety or suitability of the Works, or
- (iv) it will have an adverse impact on the achievement of the Schedule of Guaranties.

(v)

Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction".

13.2 Value Engineering

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

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

13.3 Variation Procedure

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

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

The Engineer shall, as soon as practicable after receiving such proposal (under Sub-

Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response

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

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

13.4 Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

13.5 Provisional Sums

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

- (a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or
- (b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Sub-Clause 4.5 [Nominated Subcontractors) otherwise; and for which there shall be included in the Contract Price:
 - (i) the actual amounts paid (or due to be paid) by the Contractor, and
 - (ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the percentage rate stated in the Contract Data shall be applied.

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

As an exception to the above, the Provisional Sum for the cost of the DB shall be used for payments to the Contractor of the Employer's share (one-half) of the invoices of the DB for its fees and expenses, in accordance with GC 20.2. No prior instruction of the Engineer shall be required with respect to the work of the DB. The Contractor shall produce the DB invoices and satisfactory evidence of having paid 100% of such invoices

as part of the substantiation of those Statements submitted under Sub-Clause 14.3, which contain requests for payment under the Provisional Sum toward the cost of the DB. The Engineer's certification of such Statements shall be based upon such invoices and such evidence of payment by the Contractor. Contractor's overhead, profit, etc., shall not be included in the provisional sums for the cost of the DB.

13.6 Daywork

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

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

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

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

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

13.7 Adjustments for Changes in Legislation

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

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

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

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

Notwithstanding the foregoing, the Contractor shall not be entitled to an extension of time if the relevant delay has already been taken into account in the determination of a previous extension of time and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8 [Adjustments for Changes in Cost].

13.8 Adjustments for Changes in Cost

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

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

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

 $P_n=a+bL_n/L_0+cE_n/E_0+dM_n/M_0$

where:

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

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

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

"Ln", "En", "Mn", ... are the current cost indices or reference prices for period "n", expressed

in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

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

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

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

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

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

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

14. Contract Price and Payment

14.1 The Contract Price

Unless otherwise stated in the Particular Conditions:

- (a) the Contract Price shall be the Bill of Quantities Contract t and be subject to adjustments in accordance with the Contract;
- (b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs,
- (c) any quantities which may be set out in a Schedule are estimated quantities and are not to be taken as the actual and correct quantities of the Works which the Contractor is required to execute; and

(d) any quantities or price data which may be set out in a Schedule shall be used for the purposes stated in the Schedule and may be inapplicable for other purposes.

However, if any part of the Works is to be paid according to quantity supplied or work done, the provisions for measurement and evaluation shall be as stated in the Particular Conditions. The Contract Price shall be determined accordingly, subject to adjustments in accordance with the Contract.

Notwithstanding the provisions of sub-paragraph (b), the Contractor's Equipment, including essential spare parts therefor, imported by the Contractor for the sole purpose of executing the Contract shall be exempt from the payment of import duties and taxes upon importation.

14.2 Advance Payment

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

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

The Engineer shall deliver to the Employer and to the Contractor an Interim Payment Certificate for the first instalment after receiving a Statement (under Sub-Clause 14.3 [Application for Interim Payment Certificates]) and after the Employer receives (i) the Performance Security in accordance with Sub-Clause

4.2 [Performance Security] (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Contract Data or in another form approved by the Employer.

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

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

(a) deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment and deductions and repayments of retention) exceeds 30 per cent (30%) of the Accepted Contract Amount less Provisional Sums; and

(b) deductions shall be made at the amortisation rate stated in the Contract Data of the amount of each Interim Payment Certificate (excluding the advance payment and deductions for its repayments as well as deductions for retention money) in the currencies and proportions of the advance payment until such time as the advance payment has been repaid; provided that the advance payment shall be completely repaid prior to the time when 90 per cent (90%) of the Accepted Contract Amount less Provisional Sums has been certified for payment.

If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Employer], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and in case of termination under Clause 15 [Termination by Employer] and Sub-Clause 19.6 [Optional Termination, Payment and Release], payable by the Contractor to the Employer".

14.3 Application for Interim Payment Certificates

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

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

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

(g) the deduction of amounts certified in all previous Payment Certificates.

14.4 Schedule of Payments

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

- the instalments quoted in the Schedule of Payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];
- (b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and
- (c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which the Schedule of Payments was based, then the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less or more than that on which the instalments were previously based.

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

14.5 Plant and Materials intended for the Works

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

If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Schedules, this Sub-Clause shall not apply.

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

- (a) the Contractor has:
 - (i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and
 - (ii) submitted a statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence; and either:
- (b) the relevant Plant and Materials:
 - (i) are those listed in the Schedules for payment when shipped,

- (ii) have been shipped to the Country, en route to the Site, in accordance with the Contract; and
- (iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Engineer together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Employer in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration; or
- (c) the relevant Plant and Materials:
 - (i) are those listed in the Schedule for payment when delivered to the Site, and
 - (ii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in accordance with the Contract.

The additional amount to be certified shall be the equivalent of eighty percent of the Engineer's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials.

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

14.6 Issue of Interim Payment Certificates

No amount will be certified or paid until the Employer has received and approved the Performance Security. Thereafter, the Engineer shall, within 28 days after receiving a Statement and supporting documents, issue to the Employer an Interim Payment Certificate which shall state the amount which the Engineer fairly determines to be due, with all supporting particulars for any reduction or withholding made by the Engineer on the Statement if any".

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

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

(a) if anything supplied or work done by the Contractor is not in accordance with the

- Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or
- (b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer's acceptance, approval, consent or satisfaction, and shall include any amounts due to or from the Contractor in accordance with a decision by the DB made under Sub-Clause 20.4 [Obtaining Dispute Board'.

14.7 Payment

The Employer shall pay to the Contractor:

- (a) the first instalment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and Sub-Clause 14.2 [Advance Payment], whichever is later:
- (b) the amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents, the amount shown on any statement submitted by the Contractor, within 14 days after such statement is submitted, any discrepancy being rectified in the next payment to the Contractor including any amounts due in accordance with a decision by the DB which have been included in the Interim Payment Certificate; and
- (c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate or, the undisputed amount shown in the Final Statement, within 56 days after the date of notification of the suspension in accordance with Sub-Clause 16.2 [Termination by Contractor].

Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.

14.8 Delayed Payment

If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive financing charges compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.

Unless otherwise stated in the Contract Data, these financing charges shall be calculated at the annual rate of three percentage points above the discount rate of the central bank in the country of the currency of payment, or if not applicable, the interbank offered rate,

and shall be paid in such currency.

The Contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy.

14.9 Payment of Retention Money

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

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

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

The relevant percentage for each Section shall be the percentage value of the Section as stated in the Appendix to Tender. If the percentage value of a Section is not stated in the Appendix to Tender, no percentage of either half of the Retention Money shall be released under this Sub-Clause in respect of such Section.

Unless otherwise stated in the Contract Data, when the Taking-Over Certificate has been issued for the Works, the Works have passed all specified tests (including the Tests after Completion, if any) and the first half of the Retention Money has been certified for payment by the Engineer, the Contractor shall be entitled to substitute a guarantee, in the form annexed to the Particular Conditions or in another form approved by the Employer and provided by an entity approved by the Employer, for the second half of the Retention Money. The Contractor shall ensure that the guarantee is in the amounts and currencies of the second half of the Retention Money and is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects, as specified for the Performance Security in Sub-Clause 4.2. On receipt by the Employer of the required guarantee, the Engineer shall certify and the Employer shall pay the second half of the Retention Money. The release of the second half of the Retention Money against a guarantee shall then be in lieu of the release under the second paragraph of this Sub-Clause. The Employer shall return the guarantee to the Contractor within 21 days after receiving a copy of the Performance Certificate.

If the Performance Security required under Sub-Clause 4.2 is in the form of a demand guarantee, and the amount guaranteed under it when the Taking-Over Certificate is issued

is more than half of the Retention Money, then the Retention Money guarantee will not be required. If the amount guaranteed under the Performance Security when the Taking-Over Certificate is issued is less than half of the Retention Money, the Retention Money guarantee will only be required for the difference between half of the Retention Money and the amount guaranteed under the Performance Security".

14.10 Statement at Completion

Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Engineer six copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates], showing:

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

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

14.11 Application for Final Payment Certificate

Within 56 days after receiving the Performance Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement with supporting documents showing in detail in a 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 within 28 days from receipt of the said draft 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. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Engineer and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.4 [Obtaining Dispute Board's Decision] or

Sub-Clause 20.5 [Amicable Settlement], the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement.

14.12 Discharge

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

14.13 Issue of Final Payment Certificate

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

- (a) the amount which he fairly determines is finally due, and
- (b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance (if any) due from the Employer to the

Contractor or from the Contractor to the Employer, as the case may be".

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

14.14 Cessation of Employer's Liability

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

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

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

14.15 Currencies of Payment

The Contract Price shall be paid in the currency or currencies in which the bid price was expressed in the Letter of Bid. If more than one currency is so named, payments shall be made as follows:

- (a) payment of the damages specified in GC 8.7, shall be made in the currencies and proportions specified in the Letter of Bid;
- (b) other payments to the Employer by the Contractor shall be made in the currency in which the sum was expended by the Employer, or in such currency as may be agreed by both Parties:
- (c) if any amount payable by the Contractor to the Employer in a particular currency exceeds the sum payable by the Employer to the Contractor in that currency, the Employer may recover the balance of this amount from the sums otherwise payable to the Contractor in other currencies; and
- (d) the applicable rates of exchange shall be those prevailing on the Base Date and determined by the central bank of the Country.

15. Termination by Employer

15.1 Notice to Correct

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

15.2 Termination by Employer

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

- (a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],
- (b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,
- (c) without reasonable excuse fails:
 - (i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or
 - (ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 28 days after receiving it,
- (d) subcontracts the whole of the Works or assigns the Contract without the required agreement,
- (e) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to

any of these acts or events, or

- (f) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:
 - (i) for doing or forbearing to do any action in relation to the Contract, or
 - (ii) for showing or forbearing to show favour or disfavour to any person in relation to the Contract,

or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (f). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.

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

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

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

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

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

15.3 Valuation at Date of Termination

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

15.4 Payment after Termination

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

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

15.5 Employer's Entitlement to Termination for Convenience

The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security.

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 19.6 [Optional Termination, Payment and Release].

15.6 Corrupt or Fraudulent Practice

If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive or coercive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 15 shall apply as if such expulsion had been made under Sub-Clause 15.2 [Termination by Employer].

Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive or coercive practice during the execution of the Works, then that employee shall be removed in accordance with Sub-Clause 6.9 [Contractor's Personnel].

For the purpose of this Sub-Clause:

- (a) "corrupt practice" means the offering, giving, receiving of soliciting of any thing of value to influence the act of a public official in the procurement process or in the Contract execution.
- (b) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of the Contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid

- submission) designated to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.
- (c) "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Borrower, designated to establish bid prices at artificial, non-competitive levels.
- (d) "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.

16. Suspension and Termination by Contractor

16.1 Contractor's Entitlement to Suspend Work

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

Notwithstanding the above, if the Bank has suspended disbursements under the loan or credit from which payments to the Contractor are being made, in whole or in part, for the execution of the Works, and no alternative funds are available as provided for in Sub-Clause 2.4 [Employer's Financial Arrangements], the Contractor may by notice suspend work or reduce the rate of work at any time, but not less than 7 days after the Borrower having received the suspension notification from the Bank.

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

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

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

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

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

16.2 Termination by Contractor

The Contractor shall be entitled to terminate the Contract if:

- (a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work] in respect of a failure to comply with Sub-Clause 2.4 [Employer's Financial Arrangements],
- (b) the Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,
- (c) the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Employer's Claims]).
- (d) the Employer substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
- (e) the Employer fails to comply with Sub-Clause 1.6 [Contract Agreement] or Sub-Clause 1.7 [Assignment],
- (f) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or
- (g) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.
- (h) the Contractor does not receive the Engineer's instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works]".

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

In the event the Bank suspends the loan or credit from which part or whole of the payments to the Contractor are being made, if the Contractor has not received the sums due to him upon expiration of the 14 days referred to in Sub-Clause 14.7 [Payment] for payments under Interim Payment Certificates, the Contractor may, without prejudice to the Contractor's entitlement to financing charges under Sub-Clause

14.8 [Delayed Payment], take one of the following actions, namely (i) suspend work or reduce the rate of work, and (ii) terminate his employment under the Contract by giving notice to the Employer, with a copy to the Engineer, such termination to take effect 14 days after the giving of the notice.

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

16.3 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [Employer's Entitlement to Termination], Sub-Clause

16.2 [Termination by Contractor] or Sub-Clause 19.6 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

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

16.4 Payment on Termination

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

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

17. Risk and Responsibility

17.1 Indemnities

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

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

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

17.2 Contractor's Care of the Works

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

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

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

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

17.3 Employer's Risks

The risks referred to in Sub-Clause 17.4 [Consequences of Employer's Risks] below, insofar as they directly affect the execution of the Works in the Country, are:

- (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country,
- (c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel.
- (d) munitions of war, explosive materials, ionising radiation or contamination by radioactivity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,
- (g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, if any, and
- (h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.

17.4 Consequences of Employer's Risks

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

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

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

of subparagraphs (f) and (g) of Sub-Clause 17.3 [Employer's Risks], Cost plus profit shall be payable.

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

17.5 Intellectual and Industrial Property Rights

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

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

The Employer shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

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

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

(ii) the use of Contractor's Equipment, or (iii) the proper use of the Works.

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

17.6 Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be

suffered by the other Party in connection with the Contract, other than as specifically provided in Sub-Clause 8.7 [Delay Damages]; Sub-Clause 11.2 [Cost of Remedying Defects]; Sub-Clause 15.4 [Payment after Termination]; Sub-Clause 16.4 [Payment on Termination]; Sub-Clause 17.1 [Indemnities]; Sub-Clause 17.4 (b) [Consequences of Employer's Risks] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights].

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, as stated in the Contract Data, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.

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

17.7 Use of Employer's Accommodation/Facilities

The Contractor shall take full responsibility for the care of the Employer-provided accommodation and facilities, if any, as detailed in the Employer's Requirements, from the respective dates of hand-over to the Contractor until cessation of occupation (where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).

If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Employer is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Engineer.

18. Insurance

18.1 General Requirements for Insurances

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

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

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

If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a

policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

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

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

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

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

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

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

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

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

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

The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

18.2 Insurance for Works and Contractor's Equipment

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

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

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

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

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage,
- (c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Employer's Risks],
- (d) shall also cover, to the extent specifically required in the bidding documents of the Contract, loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the risks listed in subparagraphs (c), (g), and (h) of Sub-Clause 17.3 [Employer's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Contract Data (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
- (e) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts

which are lost or damaged as a direct result of this defective condition and not as described in subparagraph (ii) below),

- (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,
- (iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and
- (iv) Goods while they are not in the Country, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].

If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.5 [Employer's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

18.3 Insurance against Injury to Persons and Damage to Property

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

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

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

- (a) shall be effected and maintained by the Contractor as insuring Party,
- (b) shall be in the joint names of the Parties,
- (c) shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and
- (d) may however exclude liability to the extent that it arises from:
 - (i) the Employer's right to have the Permanent Works executed on, over, under, in

or through any land, and to occupy this land for the Permanent Works,

- (ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and
- (iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.

18.4 Insurance for Contractor's Personnel

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

The insurance shall cover the Employer and the Engineer against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

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

19. Force Majeure

19.1 Definition of Force Majeure

In this Clause, "Force Majeure" means an exceptional event or circumstance:

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

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

- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- (ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel,

revolution, insurrection, military or usurped power, or civil war,

- (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
- (iv) munitions of war, explosive materials, ionising radiation or contamination by radioactivity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

19.2 Notice of Force Majeure

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

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

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

19.3 Duty to Minimise Delay

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

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

19.4 Consequences of Force Majeure

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

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

to in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment].

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

19.5 Force Majeure Affecting Sub-contractor

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

19.6 Optional Termination, Payment and Release

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

16.3 [Cessation of Work and Removal of Contractor's Equipment].

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

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

19.7 Release from Performance under the Law

Notwithstanding any other provision of this Clause, if any event or circumstance outside the

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

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

20. Claims, Disputes and Arbitration

20.1 Contractor's Claims

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

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

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

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

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

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

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

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

Within the above defined period of 42 days, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract .

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

If the Engineer does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Engineer and any of the Parties may refer to the Dispute Board in accordance with Sub-Clause 20.4 [Obtaining Dispute Board's Decision .

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

20.2 Appointment of the Dispute Board

Disputes shall be referred to a DB for decision in accordance with Sub-Clause 20.4 [Obtaining Dispute Board's Decision]. The Parties shall appoint a DB by the date stated in the Contract Data.

The DB shall comprise, as stated in the Contract Data, either one or three suitably qualified persons ("the members"), each of whom shall be fluent in the language for communication defined in the Contract and shall be a professional experienced in the type of construction involved in the Works and with the interpretation of contractual documents. If the number is not so stated and the Parties do not agree otherwise, the

DB shall comprise three persons.

If the Parties have not jointly appointed the DB 21 days before the date stated in the Contract Data and the DB is to comprise three persons, each Party shall nominate one member for the approval of the other Party. The first two members shall recommend and the Parties shall agree upon the third member, who shall act as chairman.

However, if a list of potential members has been agreed by the Parties and is included in the Contract, the members shall be selected from those on the list, other than anyone who is unable or unwilling to accept appointment to the DB.

The agreement between the Parties and either the sole member or each of the three members shall incorporate by reference the General Conditions of Dispute Board Agreement contained in the Appendix to these General Conditions, with such amendments as are agreed between them.

The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the DB consults, shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

If at any time the Parties so agree, they may jointly refer a matter to the DB for it to give its opinion. Neither Party shall consult the DB on any matter without the agreement of the other Party.

If a member declines to act or is unable to act as a result of death, disability, resignation or termination of appointment, a replacement shall be appointed in the same manner as the replaced person was required to have been nominated or agreed upon, as described in this Sub-Clause.

The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Employer or the Contractor acting alone. Unless otherwise agreed by both Parties, the appointment of the DB (including each member) shall expire when the discharge referred to in Sub-Clause 14.12 [Discharge] shall have become effective.

20.3 Failure to Agree on the Composition of the Dispute Board

If any of the following conditions apply, namely:

- (a) the Parties fail to agree upon the appointment of the sole member of the DB by the date stated in the first paragraph of Sub-Clause 20.2 [Appointment of the Dispute Board],
- (b) either Party fails to nominate a member (for approval by the other Party), or fails to approve a member nominated by the other Party, of a DB of three persons by such date.
- (c) the Parties fail to agree upon the appointment of the third member (to act as chairman) of the DB by such date, or
- (d) the Parties fail to agree upon the appointment of a replacement person within 42

days after the date on which the sole member or one of the three members declines to act or is unable to act as a result of death, disability, resignation or termination of appointment,

then the appointing entity or official named in the Contract Data shall, upon the request of either or both of the Parties and after due consultation with both Parties, appoint this member of the DB. This appointment shall be final and conclusive.

20.4 Obtaining Dispute Board's Decision

If a dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works, including any dispute as to any certificate, determination, instruction, opinion or valuation of the Engineer, either Party may refer the dispute in writing to the DB for its decision, with copies to the other Party and the Engineer. Such reference shall state that it is given under this Sub-Clause.

For a DB of three persons, the DB shall be deemed to have received such reference on the date when it is received by the chairman of the DB.

Both Parties shall promptly make available to the DB all such additional information, further access to the Site, and appropriate facilities, as the DB may require for the purposes of making a decision on such dispute. The DB shall be deemed to be not acting as arbitrator(s).

Within 84 days after receiving such reference, or within such other period as may be proposed by the DB and approved by both Parties, the DB shall give its decision, which shall be reasoned and shall state that it is given under this Sub-Clause. The decision shall be binding on both Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement or an arbitral award as described below. Unless the Contract has already been abandoned, repudiated or terminated, the Contractor shall continue to proceed with the Works in accordance with the Contract.

If either Party is dissatisfied with the DB's decision, then either Party may, within 28 days after receiving the decision, give a Notice of Dissatisfaction to the other Party indicating its dissatisfaction and intention to commence arbitration. If the DB fails to give its decision within the period of 84 days (or as otherwise approved) after receiving such reference, then either Party may, within 28 days after this period has expired, give a Notice of Dissatisfaction to the other Party.

In either event, this Notice of Dissatisfaction shall state that it is given under this Sub-Clause, and shall set out the matter in dispute and the reason(s) for dissatisfaction. Except as stated in Sub-Clause 20.7 [Failure to Comply with Dispute Board's Decision] and Sub-Clause 20.8 [Expiry of Dispute Board's Appointment], neither Party shall be entitled to commence arbitration of a dispute unless a Notice of Dissatisfaction has been given in accordance with this Sub-Clause.

If the DB has given its decision as to a matter in dispute to both Parties, and no Notice of Dissatisfaction has been given by either Party within 28 days after it received the DB's decision, then the decision shall become final and binding upon both Parties.

If the decision of the DAB requires a payment by one Party to the other Party, the DAB may require the payee to provide an appropriate security in respect of such payment.

20.5 Amicable Settlement

Where a Notice of Dissatisfaction has been given under Sub-Clause 20.4 above, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, the Party giving a Notice of Dissatisfaction in accordance with Sub-Clause 20.4 above should move to commence arbitration after the fifty-sixth day from the day on which a Notice of Dissatisfaction was given, even if no attempt at an amicable settlement has been made.

20.6 Arbitration

Any dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 20.5 above and in respect of which the DB's decision (if any) has not become final and binding shall be finally settled by arbitration. Arbitration shall be conducted as follows:

- (a) if the contract is with foreign contractors (or if the lead partner is a foreign contractor, in case of JV), international arbitration with proceedings administered by the International Chamber of Commerce (ICC) and conducted under the ICC Rules of Arbitration; by one or more arbitrators appointed in accordance with said arbitration rules.
- (b) if the Contract is with domestic contractors, arbitration with proceedings conducted in accordance with the laws of the Employer's country.

The place of arbitration shall be a neutral location determined in accordance with the applicable rules of arbitration; and the arbitration shall be conducted in the language for communications defined in Sub-Clause 1.4 [Law and Language].

The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Engineer, and any decision of the DB, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Engineer from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.

Neither Party shall be limited in the proceedings before the arbitrators to the evidence or arguments previously put before the DB to obtain its decision, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction. Any decision of the DB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Engineer and the DB shall not be altered by reason of any arbitration being conducted during the progress of the Works.

20.7 Failure to Comply with Dispute Board's Decision

In the event that a Party fails to comply with any decision of the DB, whether binding or final and binding decision which has become final and binding, then the other Party may, without prejudice to any other rights it may have, refer the failure itself to arbitration under Sub-Clause 20.6 [Arbitration]. Sub-Clause 20.4 [Obtaining Dispute Board's Decision] and Sub-Clause 20.5 [Amicable Settlement] shall not apply to this reference.

20.8 Expiry of Dispute Board's Appointment

If a dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DB in place, whether by reason of the expiry of the DB's appointment or otherwise:

- (a) Sub-Clause 20.4 [Obtaining Dispute Board's Decision] and Sub-Clause 20.5 [Amicable Settlement] shall not apply, and
- (b) the dispute may be referred directly to arbitration under Sub-Clause 20.6[Arbitration].

APPENDIX

General Conditions of Dispute Board Agreement

1. Definitions

Each "Dispute Board Agreement" is a tripartite agreement by and between:

- (a) the "Employer";
- (b) the "Contractor"; and
- (c) the "Member" who is defined in the Dispute Agreement as being:
 - (i) the sole member of the "DB" and, where this is the case, all references to the "Other Members" do not apply, or
 - (ii) one of the three persons who are jointly called the "DB" (or "dispute board") and, where this is the case, the other two persons are called the "Other Members".

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Agreement, which incorporates this Appendix. In the Dispute Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

2. General Provisions

Unless otherwise stated in the Dispute Board Agreement, it shall take effect on the latest of the following dates:

- (a) the Commencement Date defined in the Contract,
- (b) when the Employer, the Contractor and the Member have each signed the Dispute Board Agreement, or
- (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute board agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70 days' notice of resignation to the Employer and to the Contractor, and the Dispute Agreement shall terminate upon the expiry of this period.

3. Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor and the Engineer. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:

- (a) experienced in the work which the Contractor is to carry out under the Contract,
- (b) experienced in the interpretation of contract documentation, and
- (c) fluent in the language for communications defined in the Contract.

4. General Obligations of the Member

The Member shall:

- (a) have no interest financial or otherwise in the Employer, the Contractor or the Engineer, nor any financial interest in the Contract except for payment under the Dispute Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Engineer, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Engineer, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
- (e) comply with the annexed procedural rules and with Sub-Clause 20.4 of the Conditions of Contract;
- (f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the annexed procedural rules;
- (g) not while a Member enter into discussions or make any agreement with the Employer, the Contractor or the Engineer regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Agreement;

- (h) ensure his/her availability for any site visit and hearings as are necessary; and (i) treat the details of the Contract and all the DB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any); and
- (i) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

5. General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DB's activities under the Contract and the Dispute Agreement, and except to the extent that prior agreement is given by the Employer, the Contractor and the Other Members (if any). The Employer and the Contractor shall be responsible for compliance with this provision, by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

- (a) be appointed as an arbitrator in any arbitration under the Contract;
- (b) be called as a witness to give evidence concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he/she is relieved from liability under the preceding paragraph.

6. Payment

The Member shall be paid as follows, in the currency named in the Dispute Board Agreement:

- (a) a retainer fee per calendar month, which shall be considered as payment in full for:
 - (i) being available on 28 days' notice for all site visits and hearings;
 - (ii) becoming and remaining conversant with all project developments and maintaining relevant files;

- (iii) all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his duties; and
- (iv) all services performed hereunder except those referred to in subparagraphs (b) and (c) of this Clause.

The retainer fee shall be paid with effect from the last day of the calendar month in which the Dispute Board Agreement becomes effective; until the last day of the calendar month in which the Taking-Over Certificate is issued for the whole of the Works.

With effect from the first day of the calendar month following the month in which the Taking-Over Certificate is issued for the whole of the Works, the retainer fee shall be reduced by one third. This reduced fee shall be paid until the first day of the calendar month in which the Member resigns or the Dispute Board Agreement is otherwise terminated.

- (b) a daily fee shall be considered as payment in full for:
 - each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the site, or another location of a meeting with the Other Members (if any);
 - (ii) each working day on Site visits, hearings or preparing decisions; and
 - (iii) each day spent reading submissions in preparation for a hearing.
 - (c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent of the daily fee referred to in sub-paragraph (b) of this Clause;
 - (d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The daily fee shall be as specified in the Dispute Board Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor and the Member, at each anniversary of the date on which the Dispute Board Agreement became effective.

If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the Contract Data shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within 56 calendar days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Board Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the operation of the DB; and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Sub-Clause 14.8 of the Conditions of Contract.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without notice) until the payment is received, and/or (ii) resign his/her appointment by giving notice under Clause 7.

7. Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Board Agreement by giving 42 days' notice to the Member; or (ii) the Member may resign as provided for in Clause 2.

If the Member fails to comply with the Dispute Board Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate it by notice to the Member. The notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Board Agreement, the Member may, without prejudice to his other rights, terminate it by notice to the Employer and the Contractor. The notice shall take effect when received by them both.

Any such notice, resignation and termination shall be final and binding on the Employer, the Contractor and the Member. However, a notice by the Employer or the Contractor, but not by both, shall be of no effect.

8. Default of the Member

If the Member fails to comply with any of his obligations under Clause 4 (a) -(d) above, he shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Member (if any), for proceeding or decisions (if any) of the DB which are rendered void or ineffective by the said failure to comply.

If the Member fails to comply with any of his obligations under Clause 4 (e) -(i) above, he shall not be entitled to any fees or expenses hereunder from the date and to the extent of the non-compliance and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses already received by the Member, for proceedings or decisions (if any) of the DB which are rendered void or ineffective by the said failure to

comply.".

9. Disputes

Any dispute or claim arising out of or in connection with this Dispute Board Agreement, or the breach, termination or invalidity thereof shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration".

Annexure

PROCEDURAL RULES

- Unless otherwise agreed by the Employer and the Contractor, the DB shall visit the Site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.
- The timing of and agenda for each Site visit shall be as agreed jointly by the DB, the Employer and the Contractor, or in the absence of agreement, shall be decided by the DB. The purpose of Site visits is to enable the DB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavour to prevent potential problems or claims from becoming disputes.
- Site visits shall be attended by the Employer, the Contractor and the Engineer and shall be co-ordinated by the Employer in co-operation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each Site visit and before leaving the site, the DB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.
- The Employer and the Contractor shall furnish to the DB one copy of all documents which the DB may request, including Contract documents, progress reports, variation instructions, certificates and other documents pertinent to the performance of the Contract. All communications between the DB and the Employer or the Contractor shall be copied to the other Party. If the DB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.
- If any dispute is referred to the DB in accordance with Sub-Clause 20.4 of the Conditions of Contract, the DB shall proceed in accordance with Sub-Clause 20.4 and these Rules. Subject to the time allowed to give notice of a decision and other relevant factors, the DB shall:
 - (a) act fairly and impartially as between the Employer and the Contractor, giving each
 of them a reasonable opportunity of putting his case and responding to the
 other's case, and
 - (b) adopt procedures suitable to the dispute, avoiding unnecessary delay or expense.
- The DB may conduct a hearing on the dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.

- Except as otherwise agreed in writing by the Employer and the Contractor, the DB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Engineer, and to proceed in the absence of any party who the DB is satisfied received notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.
- 8 The Employer and the Contractor empower the DB, among other things, to:
 - (a) establish the procedure to be applied in deciding a dispute,
 - (b) decide upon the DB's own jurisdiction, and as to the scope of any dispute referred to it,
 - (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules,
 - (d) take the initiative in ascertaining the facts and matters required for a decision,
 - (e) make use of its own specialist knowledge, if any,
 - (f) decide upon the payment of financing charges in accordance with the Contract,
 - (g) decide upon any provisional relief such as interim or conservatory measures, and
 - (h) open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of the Engineer, relevant to the dispute.
- The DB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DB shall make and give its decision in accordance with Sub-Clause 20.4, or as otherwise agreed by the Employer and the Contractor in writing. If the DB comprises three persons:
 - (a) it shall convene in private after a hearing, if any, in order to have discussions and prepare its decision:
 - (b) it shall endeavour to reach a unanimous decision: if this proves impossible, the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
 - (c) if a Member fails to attend a meeting or hearing, or to fulfil any required function, the other two Members may nevertheless proceed to make a decision, unless:
 - (i) either the Employer or the Contractor does not agree that they do so, or
 - (ii) the absent Member is the chairman and he/she instructs the other Members not to make a decision.



CHENNAI METRO RAIL LIMITED

PART-3

SECTION VIII

PARTICULAR CONDITIONS OF CONTRACT

Section VIII Particular Conditions

Notes on Particular Conditions

The Particular Conditions (PC) complement the General Conditions (GC) to specify data and contractual requirements linked to the special circumstances of the country, the Employer, the Engineer, the sector, the overall project and the Works. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

Part A, Contract Data of the PC, includes data to complement the GC in a manner similar to the way in which the Bid Data Sheet complements the Instructions to Bidders.

Part B, the Specific Provisions of the PC should specify country- or project-specific provisions for PC in each case.

Clause numbers in the PC correspond to those in the GC.

Particular Conditions (PC)

Part A - Contract Data

Sl.no.	Conditions of	Sub-	Data
	Contract	Clause	
1	Employer's name and address	1.1.2.2 & 1.3	Chennai Metro Rail Limited CMRL Depot, Admin. Building, Poonamallee High Road, Koyambedu, Chennai 600 107. Tel no: 044 2379 2000 Fax No.: 044 2379 2163 Email id: dpcmrl@tn.gov.in
2	Engineer's name and address	1.1.2.4 & 1.3	Director(Projects), CMRL Depot, Admin. Building, Poonamallee High Road, Koyambedu, Chennai 600 107. Tel no: 044 2379 2000 Fax No.: 044 2379 2163 Email id: dpcmrl@tn.gov.in
3	Time for Completion	1.1.3.3	18 Months
4	Defects Notification Period	1.1.3.7	730 days
5	Profit	1.2	deleted
6	Electronic transmission systems	1.3	Fax 044 23792163 and e-mail dpcmrl@tn.gov.in
7	Governing Law	1.4	INDIA
8	Ruling language	1.4	ENGLISH
9	Language for communications	1.4	ENGLISH
10	Time for the Parties entering into a Contract Agreement	1.6	15 days
11	Employers Financial arrangements	2.4	Deleted
12	Time for access to, and possession of all parts of, the Site	2.1	From the date of issue of LOA
13	Performance Security	4.2	'The Performance Security will be in the form of a "demand guarantee" in the amount of 7.5% percent of the Accepted

	1	<u> </u>	Contract Amount and in the same		
			Contract Amount and in the same		
			currency of the Accepted Contract		
4.4	Daniero Erran	F 7	Amount.		
14	Design Error	5.7	Delete 'Design'		
15	Normal working hours	6.5	a. It is the responsibility of the contractor		
			to avail the work permit as per the		
			prescribed format available with CMRL		
			before commencing the work. As the		
			works are to be carried out in already		
			commissioned stations, the working		
			hours shall be restricted only to non-		
			revenue hours depending upon the work's nature and location.		
			b. Contractor should quote rates		
			considering the restricted working hours		
			and no claim on this account shall be		
			accepted by CMRL.		
16	Commencement of	8.1	Within 3 days from the date of issue of		
	Works		LOA		
		8.1(b)	Deleted		
17	Delay damages for	8.7	Table: Summary of Liquidated Damages		
	the Works		below.		
18	Maximum amount of	8.7	10 %		
	delay damages				
19	Provisional Sums	13.5.(b)(ii)	Not Applicable		
20	Adjustments for	13.7	Not Applicable		
0.4	changes in legislation	40.0	N. C. C. L.		
21	Adjustments for	13.8	Not Applicable		
- 22	Changes in Cost Total Advance	14.0	Not Applicable		
22	Total Advance Payment	14.2	Not Applicable		
23	Repayment	14 2(b)	Not Applicable		
23	amortization rate of	14.2(b)	Not Applicable		
	advance payment				
24	Percentage of	14.3(c)	2.5%		
_ '	Retention	(0)			
25	Limit of Retention	14.3(c)	5% of the Accepted Contract		
	Money		Amount		
26	Plant and Materials	14.5(b)(i)	Deleted		
		14.5(c)(i)	Deleted		
27	Minimum Amount of	14.6	Not Applicable		

	Interim Payment Certificates		
28	Maximum total liability of the Contractor to the Employer	17.6	Not Applicable
29	Periods for submission of insurance: a. evidence of insurance. b. relevant policies	18.1	3 days from the issue of LOA
30	Maximum amount of deductibles for insurance of the Employer's risks	18.2(d)	1% of the Contract amount for each occurrence.
31	Minimum amount of third party insurance	18.3	Not Applicable
32	Date by which the DB shall be appointed	20.2	56 days after the Commencement date
33	The DB shall be comprised of	20.2	One sole Member
34	List of potential DB sole members	20.2	Panel of 3 (three) Officers will be sent by Employer and the Contractor will choose one. Retainer fee Rs. 50,000/m and Rs. 10,000 per day/ part for site visit
35	Appointment (if not agreed) to be made by	20.3	MD CMRL
36	Place of Arbitration	20.6	Chennai
37	Language of Arbitration	20.6	English
38	Number of Arbitrators	20.6	Three

Table: Summary of Liquidated Damages as per clause 8.7 of GC.

	LIQUIDATED DAMAGES TABLE CONT	RACT PACKAG	SE – ZT-02
	Description	Amount to be levied for the delay of 0 to 10days after the permissible period	Amount to be levied for the delay above 10 days after the permissible period
1	If the reported faults/repair are not attended within 10 days, Liquidated damages shall be levied for the delayed period	1000/day	2000/day
2	On any Civil works not carried out within the period permitted along with the Engineer's Instructions, Liquidated damages shall be levied for the delayed period	1000/day	2000/day



SELECTION OF TENDERER FOR Water leakage repair works and maintenance works

PARTICULAR CONDITIONS

Part B-Specific Provisions





CHENNAI METRO RAIL LIMITED

CONTRACT NO. LT-01

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Part 3 Section VIII

PC-Part B

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PART B - Particular Conditions (SP)

Supplement to Part 3 Section VII – General Conditions, unless otherwise stated.

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.	
SP 1	1.1.3.10; Contract Period	Contract Period means the period from the commencement date to the date 18 Months after that date on which whole of the works shall have been completed as certified by the Engineer under clause 10 (old)	
SP 2	1.1.6.11	Add the following sub-clauses after Sub-Clause 1.1.6.10 Part 3 Section VII General Conditions.	
	Other Definitions	 1.1.6.11 "Time for Completion" means a date identified as such in the Contract Documents in GC 8.2 of contract document and the same may be extended by the Engineer's Representative pursuant to Clause 8.4 1.1.6.12 "Project Contractors" means contractors engaged on the Project from time to time by the Engineer. 	
		1.1.6.13 "Interfacing Contractors" means any of the following whose activities or the works they are engaged to carry out in any way or at any time affect or are affected by the Works:	
		 (a) Project Contractors and design or specialist consultants engaged on the Project from time to time by the Engineer, the Government of of India, the Government of Tamil Nadu or the utility providers; (b) utility providers; 	
		(c) developers or franchisees appointed on the Project from time to time by the Engineer;	
		 (d) subcontractors of any tier of the contractors within category (a) above, and contractors and subcontractors of any tier of utility providers, developers and franchisees within categories (b) and (c) above; 	
		provided that the definition shall exclude the Contractor and his subcontractors of any tier in relation to the Works and in any other capacity which would otherwise fall within categories (a) to (d) above in relation to other works.	
		1.1.6.14 "Relevant Authority" means any Government department or public body (other than the Engineer) having jurisdiction in relation to the Works.	
		1.1.6.15 "Key Date" means a date identified as such or Time for completion in the contract documents and whose non-fulfillment will attract penalty as per General Condition 8.7.	
SP 3	1.5	Modify Para 1.5 of GC with the following:	
	Priority of Documents.	(a) The contract Agreement (b) Letter of Acceptance (LoA) (c) The Letter of technical and financial bid (d) Letters of Clarifications (LoC), if any	
		(e) Addenda to the Tender document, if any	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.		
		(f) Contract Documents (i) Part 3 Section VIII –Particular Conditions Part A and Part B (ii) Part 3 Section VII – General Conditions (iii) Part 2 –Bill of Quantities. (iv) Part1- Instruction to Tenderers & Qualification criteria (v) Contractor's Proposal (vi) Any other Documents		
SP 4	2.5	Replace the number of days in second para with 84 in place of 28.		
	Employer's Claims.	Add the following to GC 2.5 at the end, as supplement to 2.5 of GC. 2.5 Employer's Claims.		
		Some of the circumstances when this Clause may apply are as follows;		
		i) Claims for amounts not insured by the Contractor.		
		ii) Claims for amounts not recovered from the insurers.		
		iii) Claims for damage caused to Interfacing Contractors, third parties or Engineer's property.		
		iv) Claims against the Contractor for not completing remedial works or to remedy defects.		
		v) Claims for the Contractor not obtaining refunds of duties, VAT, etc		
		vi) Claims for not clearing site and not reinstating such to its original condition.		
		vii) Any other unforeseen circumstances		
SP 5	3.7	Add the following sub-clauses as 3.7 below 3.6 in GC.		
	Engineer to Attempt Agreement	3.7.1 Claims Report The Contractor shall send to the Engineer once in every three months an account giving the following details; i) comprehensive particulars, along with full details and justification, of all on-going claims for any extension of time or additional payment to which the Contractor may consider himself entitled, and ii) all extra or additional work ordered by the Engineer which he has executed during the preceding three months, including any claims for extension of time or additional payment to which the Contractor may consider himself entitled. No final or interim claim for payment for any such work or expense will be considered which has not been included in such particulars.		
		3.7.2 Claim Determination and Assessment.		

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.		
		The Engir	neer shall consult with the Employer ce with this SP Sub-clause to agree or	before proceeding in
		```	ension of Time for Completion, in acc 5, 8.4, 20 and SP sub-clauses 4 and	
		(ii) any ad Contract.	ditional payment to which the Contract	or is entitled under the
		The requirements of this sub-clause are in addition to those of any other GC or SP Clauses which may apply to a claim. If the Contractor fails to comply with any GC or SP sub-clause in relation to any claim, including submission of full supporting details of his claim, the Engineer determination and assessment of any extension of time and/or additional payment shall take account of the extent (if any) to which such failure by the Contractor has prevented or prejudiced the proper investigation of the claim.		
		_	neer shall give notice to the Employer ement or determination, with supportir	
SP6	4.The contractor	Add the following sub-clauses to the end of Clause 4 of Part B General Conditions  4.25 Registers to be maintained at site  Following registers as given in the respective formats should be maintained at site and the copy of the same should be produced along with bills and the same should be produced for inspection whenever sought by the Employer.		
		S.No Description Format		
		1	Labour/Wage Register	Format-A
		2	Equipment Register	Format-B
		3	Material Register	Format-C
		4	Daily Progress Report	Format-D
		5	Work Permit/Cancellation Register	Format-E
		•	loyer reserves the right to levy reason or fails to maintain the above mention	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.
		produce the same when warranted by CMRL.

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.
SP 7	4.2	Modify para 2 of 4.2 GC
	Performance Security	The Contractor shall deliver the Performance Security to the Employer within 7 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by public sector undertaking bank (PSU) selected by the Contractor, and shall be in the form annexed to the Particular Conditions, as stipulated by the Employer, or in another form approved by the Employer.
SP8	4.6	Add the following sub-clauses to the end of Sub-Clause 4.6 of Part B General Conditions Opportunity For Interfacing Contractors and Other Contractors
	Co-operation	<ul> <li>4.6.1 Reasonable Opportunity  The Contractor shall, in accordance with the requirements of the Engineer, afford all reasonable facilities for Interfacing Contractors and / or any other contractor who may be carrying out, on or adjacent to any Site any Work not included in the Contract but required by the Engineer, any utilities undertaking or other duly constituted authority. The Contractor shall, as reasonably requested in a written manner by the Engineer, make available to any such Interfacing Contractor, other contractors, or the Engineer or any such authority, any roads or ways for the maintenance of which the Contractor is responsible, for which no additional payment shall be made by the Engineer.</li> <li>4.6.2 Inspection of Work of Interfacing Contractors</li></ul>
		4.6.5 Work Permit to be obtained by the contractor
		Tiolo Work i crimic to be obtained by the contractor

CD No	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement
SP No.	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.
		<ul> <li>a. It is the responsibility of the contractor to avail the work permit as per the prescribed format available with CMRL before commencing the work. As the works are to be carried out in already commissioned stations, the working hours shall be restricted only to non-revenue hours depending upon the work's nature and location. Contractor should quote rates considering the restricted working hours and no claim on this account shall be accepted by CMRL.</li> <li>b. The works are to be carried out as per the instructions given in the work permit and in case of Non-adherence to the instructions the employer reserves the right to cancel the work and no claim on this account shall be accepted by CMRL.</li> <li>c. The contractor should provide proper barricading and cautioning information to the commuters while carrying out the works and quoted rate should inclusive of all such incidental charges.</li> <li>d. The contractor should mobilize all required equipment but not limited to ladders, scaffolding, torch light, etc., to carry out the works and the quoted rate is inclusive of all such costs.</li> <li>e. It is the responsibility of the contractor to make the work location neat and tidy before closing the work permit and no material/equipment or contractor's belongings should be left at the work spot.</li> </ul>

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.			
SP 9	4.8 Safety Procedures	Add the following sub-clauses to clause 4.8 of General Conditions are renumber the same:			
		g)			
		Risk	Hours from the notice of event within which the work should have are commenced duly mitigating the risk	Penalty	
		HIGH	6 Hrs	Failure to comply and restart within 6 hrs penalty @ Rs.5,000/- per day per NCR every 24 hrs	
		MEDIUM	12Hrs	Failure to comply and restart within12 hrs penalty @ Rs.2500 /-per day per NCR every 24 hrs	
		LOW	24 Hrs	Failure to comply and restart within 24 hrs penalty @ Rs.1000 /-per day per NCR every 48 hrs	
SP 10	4.9	Add the following sub-clauses to clause 4.9 of General Conditions and			
	Quality Assurance	<ul> <li>renumber the same:</li> <li>4.9.1 Before commencing the work, the contractor has to submit the method statement along with sample material proposed for repair works. It is the responsibility of the contractor to propose the appropriate suitable to the site condition.</li> <li>4.9.2 The contractor is fully responsible for the workmanship and in case of</li> </ul>			

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.	
	Sub-Clause No.	failure of the proposed method to achieve the required result the same has to be rectified/redone without any extra cost to the Employer.	
		4.9.3 The works executed under this contract should be covered under the Defect Liability Period of 2 years.	
		4.9.4 The quoted rate should be inclusive of all cost required for testing of materials proposed for the repair works	
SP 11	4.10	Add the following sub-clause to the end of Sub-Clause 4.10 of General Conditions.	
	Site Data	<b>4.10.1</b> The responsibility of the Contractor under sub-clause 4.10 of GC is full and final and no claim by the Contractor for additional payment or extension of time shall be allowed on the grounds that of any misunderstanding or misapprehension by the Contractor or that incorrect or insufficient information was given to the Contractor or that he failed to obtain correct and sufficient information.	
SP 12	4.15	Add the following sub-clause to the end of Sub-Clause 4.15 of Part B General Conditions	
	Access Route	4.15.1 If any damage occurs to any bridge or road communicating with or on the routes to the Site arising from the transport of Materials, Equipment or Plant, the Contractor shall notify the Engineer with a copy to the Engineer, 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 hauler of such Materials, Equipment or Plant is required to indemnify the road authority against damage, the Engineer shall not be liable for any costs, charges or expenses in respect thereof or in relation there to.	
SP 13	4.16	Add the following sub-clause to the end of Sub-Clause 4.16 of General Conditions	
	Transport of Goods	<b>4.16.1</b> Existing roads and other public roads may be used by the Contractor at his risk and cost to carry out construction activities, with prior approval of the concerned authority.	
		4.16.2 The Contractor's heavy construction traffic or tracked equipment shall not travel on any public road or bridge, unless the Contractor has made arrangements with the authority concerned and has obtained the approval of the Engineer to such arrangements. The Contractor shall include in his price the cost of strengthening any such public road or bridge if he considers it would be necessary	
		<b>4.16.3</b> The Contractor shall repair any damage to the road or bear the cost thereof due to movement of contractor's plants and equipment, vehicles etc. to the specifications and satisfaction of road authorities as well as of Engineer.	
		4.16.4 The Contractor shall plan transportation of construction materials to	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.
		work site in accordance with traffic regulations enforced by local traffic authorities from time to time and in such a way that road accidents are avoided.
		<b>4.16.5</b> No claim whatsoever shall be entertained on this account. The transportation of certain plant, equipment and materials may not be possible during the daytime and may have to be carried out within a time schedule as specified by the traffic police.
		<b>4.16.6</b> No extra payment will be made for construction and maintenance of temporary haul roads if any needed including any special protection or strengthening required and all cost of such works shall be deemed to have been included in the costs of items contained in the Pricing Documents.
		<b>4.16.7</b> The Contractor shall be responsible for the design, coordination and carrying out all necessary road works as per MORTH Specification and these works shall include, but are not limited to, the following:
		<ul> <li>(i) Roads works including new roads, strengthening / widening of existing roads, road diversions including repairs and making up diversion works, new utility diversions, dismantling of central verges, footpaths, railings, drains etc. and any other work;</li> </ul>
		(ii) Landscaping works around stations such as car parking, earth filling, footpath, kerb stones, horticulture, etc; and
		(iii) Any other work as per site requirement as stated in the Contract or as instructed by the Engineer.
SP 14	6.4	Add the following sub-clauses to the end of Sub-Clause 6.4 of Genera Conditions
	Labour Laws	6.4.1 Claim on account of violation of Labour Laws
		The Contractor shall be solely accountable for the violation of any Labor Laws by themselves or their sub-contractors and will pay any such claim/damage to the authorities forthwith on demand. If any moneys shall, as a result of any instructions, directions or decisions from the Authorities or claim or application made under any of the labor laws or regulations, be directed to be paid by the Employer, such moneys shall be deemed to be moneys payable to the Employer by the Contractor and he will pay the same to the Employer forthwith on demand, without demur and without asking for any reasons/explanations from the Employer. On failure of the Contractor to repay the Employer any moneys paid or to be paid by it as aforesaid within seven days after the same shall have been demanded, the Employer shall be entitled to recover the amount from any moneys due or accruing to the Contractor under this or any other Contract with the Employer.
İ		6.4.2 Registration with Labor Department.
		The Contractor shall formally register with the appropriate Labor Department as the main employer of labor for this Contract, so that

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement		
0. 110.	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.		
		any issues related to labour can be issued directly to the Contractor. A copy of the registration document, and any directives issued by the Labour Department, shall be copied to the Employer's Representative.  6.4.3 Proof of compliance		
		The contractor should produce all relevant challans/receipts as a proof of compliance to all statutory requirements along with the bills and whenever warranted by CMRL and The employer reserves the right to levy reasonable amount as fine if the contractor fails to submit these documents and any claim from the statutory authority on this account should be borne by the contractor and any due amount indicated by statutory authority on account of non-compliance to the above requirement shall be levied on the contractor and the same shall be deducted from the amount outstanding to the contractor.		
SP 15	8.5	Add the following sub-clauses to the end of Sub-Clause 8.5 of Part I General Conditions		
	Delays Caused by Authorities	<b>8.5.1</b> Notwithstanding the powers of the Engineer under the provisions of <u>GC Clause 3.5</u> to decide, in consultation with the Employer, whether the Contractor is fairly entitled to an extension of time, the Contractor shall not in any circumstances be entitled to an extension of time, if the relevant delay is caused directly or indirectly by the default of the Contractor, or by an event which is not expressly described in <u>GC Clause 8.4</u> . Without prejudice to the generality of the foregoing, the Contractor shall not be entitled to an extension of time, if the cause of the delay is:		
		(i) The failure of the Contractor to commence or to carry out work in due time, including in particular, but not so as to restrict the generality of the foregoing, a failure to produce a drawing, manufacturer's or design data, or provide any goods, supplies or materials by any delivery dates stipulated in the Contract or if caused by their subcontractor, or		
		<ul><li>(ii) Non-availability or shortage of Contractor's Equipment including Key Equipment, Temporary Works, labour, Key Personnel, utility services, equipment, goods, plant or materials, or</li></ul>		
		(iii) Weather conditions, unless they constitute a 50 year recurrence interval which adversely affect the progress of the Works, or		
		(iv) Interference by reason of the provision of facilities, access or services to the Employer, including Interfacing Contractors, in accordance with the Contractor's duties and obligations under the Contract, or		
		<ul><li>(v) Not being permitted to work up to 24 hours per day, or on Sundays, or public holidays, or</li></ul>		
		(vi) From delay in obtaining any permissions, consents or approvals of whatsoever nature required by any Law to commence or carry out		

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement	
	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.  construction, or open the Works for public use, or	
		(vii) From delay in excavating, diverting, relocating or supporting	
		utilities that have been assigned to the Contractor; or	
		(viii) From delay or refusal under any Law in regard to the Contractor's plans for importation of Contractor's Equipment including Key Equipment, Temporary Works, labour, equipment, plant, goods, supplies or materials, Key Personnel or other personnel, or	
		(ix) From delay in securing or maintaining access to and from the Site or in establishing works areas, camps, storage, offices and facilities, unless such access or provision is specified elsewhere in the Contract to be the responsibility of the Employer, or	
		<ul> <li>(x) Any interference from third parties illegally interfering with the Site, access to and from the Site or with works areas, camps, storage, offices or facilities, or</li> </ul>	
		(xi) An instruction by the Employer's Representative to revise the Quality Plan or the Safety Plan pursuant to GC Clause 4.8 or GC Clause 6.7 respectively, or	
		(xii) From delay as a result of the Contractor not fulfilling his liaison, interface and co-ordination obligations and duties with all Interfacing Contractors, as set out or implied in the Contract.	
SP 16	8.7	Add the following sub-clauses to the end of Sub-Clause 8.7 of General Conditions	
	Liquidated Damages for delays	<b>8.7.1</b> If the Contractor fails to complete the works within the time so prescribed, subject to any extension granted, he shall pay to the Employer the appropriate stated sum for every day which shall elapse between the dates on which the prescribed time expired and the date of completing the works.	
		<b>8.7.2</b> All sums payable by the Contractor to the Employer pursuant to <u>GC Clause 8.7</u> shall be paid as Liquidated Damages for delay and not as a penalty.	
SP 17	8.9	Add the following sub-clause to the end of Sub-Clause 8.9 of General Conditions	
	Consequences	8.9.1 The Contractor shall not be entitled to any extra cost incurred during	
	of Suspension	the period of any suspension of Work, if such suspension is necessary for the proper execution of the Works, or by reason of weather conditions, or by some default on the part of the Contractor, or necessary for the safety of Works, or any part thereof, or necessary for the safety of adjoining property, or safety of the general public, or workmen, or those who have to be at the Site, or to ensure safety, or to avoid disruption to traffic and utilities, or to permit fast repairs and	

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement		
	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.  restoration of any damaged utilities.		
SP 18	Clause 13.3	Add the following sub-clause at the end of Clause 13.3 of General		
01 10	Glause 15.5	Conditions		
	Variation .	13.3.1 Valuation of variation works		
	procedure			
		a)The Employer's Personnel / The Employer / The Engineer may issue instructions requiring a variation and sanction in writing any variation made by the Contractor otherwise than pursuant to an instruction of the Employer's Personnel/ The Employer / The Engineer. No variation required by the Employer's Personnel/ The Employer / The Engineer or subsequently sanctioned by him shall violate this contract.		
		b) The term "Variation" as used in these conditions means the alteration or modification of the design, quality or quantity of the work as desired by or referred to in the Contract Bills, and includes the addition, omission or substitution of any work, the alteration of the kind of standard of any of the materials or goods to be used in the work, and the removal from the site of any works materials or goods executed or brought thereon by the Contractor for the purposes of the work other than work, materials or goods which are not in accordance with this Contract.		
		c) The Employer's Personnel/ The Employer / The Engineer shall issue instructions in regard to the expenditure of Prime Cost and Provisional Sums included in the Contract Bills and of Prime Cost Sums which arise as a result of instructions issued in regard to the expenditure of Provisional Sums.		
		d) All variations required by the Employer's Personnel/ The Employer / The Engineer or subsequently sanctioned by him in writing and all work executed by The Contractor for which Provisional Sums are included in the Contract Bills shall be measured and valued by the Employer's Personnel/ The Employer / The Engineer who shall give to The Contractor an opportunity of being present at the time of such measurement and of taking such notes and measurements as the Contractor may require. The valuation of variations and of work executed by the Contractor for which a Provisional Sum is included in the Contract Bills, (other than work for which a Tender has been accepted as aforesaid) unless otherwise agreed shall be made in accordance with the following rules.		
		e) The price in the Contract Bills shall determine the valuation of work of similar character executed under similar conditions as work priced therein		
		f) The said prices, where work is not of a similar character or executed under similar conditions as aforesaid, shall be the basis of prices for the same so far as may be reasonable, failing which a fair valuation		

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement	
	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.  thereof shall be made.	
		g) Where work cannot properly be measured and valued, the Contractor shall be allowed day-work rates on the prices prevailing when such work is carried out (unless otherwise provided in the contract bills):	
		h) At the rates if any, inserted by the Contractor in the Contract Bills of in the form of Tender or	
		i) When no such rates have been inserted, at the rates prevailing in the market for material and labour and at the control rates for the controlled materials including in all cases the rate for delivery of the material at the work. Over and above the rate so worked out Contractor's overheads and profits at 15% (Fifteen Percent) shall be added and rate finally arrived for consideration and approval of the Employer.	
		j) The above mentioned percentage to be added as overheads and profits to the basic rate analysis for new items / additional items of work shall include all site and office overheads and profits of the Contractor, all incidental and connected charges / expenditure whether direct or indirect, all applicable taxes, duties and levies and similar liabilities which the Contractor may have to incur in the process of completing the said item of work and the said overheads and profits shall also include all infrastructure facilities, amenities transportation, supervision, insurance etc.	
		k) Provided that in any case voucher specifying the time daily speniupon the work (and if required by the Employer's Personnel/ The Employer /The Engineer, the workmen's names) and the materials employed shall be delivered for verification to the Employer's Personnel/ The Employer / The Engineer or his authorized representative not later than the end of the week following that in which the work has been executed.	
		I) The prices in the Contract Bills shall determine the valuation of items omitted, provided that if omissions substantially vary the conditions under which any remaining items of work are carried out the prices for such remaining items shall be valued under this clause.	
		m) Effect shall be given to the measurement and valuation of variations under this condition in Interim Certificates and by adjustment of the Contract Sum; and effect shall be given to the measurement and valuation of work for which a Provisional Sum is included in the Contract Bills under the said Clause in Interim Certificate and by adjustment of the Contract Sum in accordance with the Conditions of Contract.	
		n) If upon written application being made to him by the Contractor, the Employer's Personnel / The Employer / The Engineer is of the opinion that a variation or the execution by The Contractor of work for	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.
		which a Provisional Sum is included in the Contract Bills has involved the Contract in direct loss and/or express for which he would not be reimbursed by payment in respect of a valuation made in accordance with the rules contained in this Clause of the condition and if the said application is made within a reasonable time of the loss or expense having been incurred then the Employer's Personnel/ The Employer / The Engineer shall ascertain the amount of such loss or expense.  o) Any amount from time to time so ascertained shall be added to the Contract Sum, and if an Interim Certificate is issued after the date of ascertainment any such amount shall be added to the amount which would otherwise be stated as due in such certificate.
SP19	13.5	Provisional Sums clause stands deleted
SP 20	Adjustment for changes in legislation	Replace Sub clause 13.7 of GC with the following:  13.7.1 i) The Contractor shall ensure full compliance with tax laws of India with regard to this Contract and shall be solely responsible for the same. He shall submit copies of acknowledgements evidencing filing of returns every year and shall keep the Engineer fully indemnified against liability of tax, interest, penalty etc, of the Contractor's in respect thereof, which may arise.  The Contractor shall maintain complete records in respect of payments made for taxes, duties, octroi and other levies payable to various authorities and shall advise the Employer of the complete details of such payments every month, which shall be enclosed with the Monthly Progress Report.  These records shall remain open for inspection by the Employer or the Engineer at any time and shall be made available to them as and when required.  ii) In case the Employer receives approval for exemption, refund, waiver or reimbursement in any of the taxes applicable to the Contract, including but not limited to the Central Excise Duty, Custom Duty, TN VAT in full or part thereof; the Contractor will be advised on the process to be followed to obtain such exemption/refund/reimbursement of such taxes etc. from the concerned authority. The Contractor shall arrange for the remittance of the refund so obtained to the Employer immediately.

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement
SF NO.	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.
		the taxes to enable the Employer to claim the refund from statutory authorities. The Contractor will forthwith comply with any of the above requests of the Employer and in case of the failure of the Contractor, the amount of refund, whether estimated or actual, shall be recovered by the Engineer from the amounts due for payment to the Contractor or as debt due from the Contractor.
		iii) The Contractor shall provide a valid registration certificate and clearance certificate under Tamil Nadu Govt: VAT Act, 2005, until such certificate is submitted and accepted, no payment, including release of any advance payment, shall be made by the Engineer to the Contractor.
		13.7.2 Changes in Cost Due to Legislation:
		13.7.2.1 The Contract shall be governed by the laws for the time being in force in India.
		13.7.2.2 "Change in Law" means the occurrence or coming into force of any of the following, at any time after the Base Date.
		<ol> <li>Any new tax which is imposed after the due date of submission of tender and which impacts the performance of the Contractor with increased cost or which results in extra financial gains to the Contractor due to decreased cost in execution of Works; and</li> </ol>
		change in any law pertaining to work having the above said impact
		Then such additional or reduced cost shall be certified by the Engineer after examining records provided by the Contractor and shall be paid by or credited to the Employer, subject to sub-clause 13.16.5 below.
		13.7.2.3 Any change in the rate of any existing tax will be considered a Change in Law, if so related to the Works.
		13.7.2.4 Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited, if, the same shall have been taken into account under any other clause of the Contract.
SP 21	13.8	
	Adjustment for changes in cost	Deleted

SP No.	Section VII-GC Sub-Clause No.	ne following Clauses in this Part B – Particular Condection VII General Conditions, unless otherwise state	
SP 22	14. The Contract	Deleted the clause 14.contract Price and payment and replace with fo	
	Price.	I.Contract price and payment	
		I.1.1 The Contract shall be an item rate contract. T be paid for the actual quantity of work permane accordance with the contract documents, at the him in the Contract Bills. Measurement shall indicated in the tender specification and as quantities and prices.	ntly installed and in he rates quoted by be carried out as
		is meant to indicate the scope of the work and to basis for Tendering. The Owner reserves the decrease any of the quantities or to totally om and the Contractor shall not claim any extras or grounds.	o provide a uniform right to increase or it any item of work
		I.1.3. Quantity variation will have no ceiling limit in reitems and individual quantities can vary to a variations shall not warrant any claims for modifuncted and accepted rates.	any extent. Such
		I.1.4. The contract sum is subject to change as a res any of the items mentioned in the BOQ and operating all the quantities mentioned agains contractor shall not claim anything extra or account as the quantities are approximate only.	as a result of not st each item. The
		in 1.1.5. Tax - The rates shall also be firm and shall variations in costs of any or all inputs, such as materials, labour, exchange variations, I fluctuations in railway freights, or any condition their rates / various charges such as Value Added Tax on works concentry, octroi or other tax, duty or, and any other levy levied by the Central Governm Government or local authority except Service applicable including any variation during the Cany agreed extension thereto. No claim in respor introduction taxes or duties or levies as exis be entertained by the Employer.	abour conditions, abour conditions, itions whatsoever. tax / Duty / Freight ntract, excise duty, her tax and duty or ent or any State tax and cess, as ontract period and ect of any variation
		I.1.6. The quotes rated is inclusive all taxes and not claimed by the contractor on this account	hing extra shall be

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.	
		14.1.7 T pa	he Contract shall be an item rate contract. The Contractor shall be aid for the actual quantity of work permanently installed and in ccordance with the contract documents, at the rates quoted by him the Bill of Quantities. Measurement shall be carried out as adicated in the tender specification and as per schedule of quantities and prices.
		aı uı in oʻ	he schedule of Quantities given in Bill of Quantities is provisional and is meant to indicate the scope of the work and to provide a niform basis for Tendering. The Owner reserves the right to acrease or decrease any of the quantities or to totally omit any item if work and the Contractor shall not claim any extras or damages on nese grounds.
		14.1.9 Q ite va	Quantity variation will have no ceiling limit in respect of individual ems and individual quantities can vary to any extent. Such ariations shall not warrant any claims for modifications to already uoted and accepted rates.
		14.1.10 T a o c	he contract sum is subject to change as a result of not operating ny of the items mentioned in the BOQ and as a result of not perating all the quantities mentioned against each item. The ontractor shall not claim anything extra or damages on this account s the quantities are approximate only.
		14.2.	Terms of Payment:
		14.2.1.	All payments by the Employer under this contract will be made through banking channel within the specified period based on detailed measurements taken by the contractor in the presence of Employer at the site and it will be checked and recorded by the Employer or his representative. The Tender should be prepared by the contractor based on the above measurement and the payment will be made after the scrutiny and certification of the bill by the Engineers.
		14.2.2.	All such interim / progressive payments shall be regarded as payment, by way of advances against final payment only, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled work, to be rejected, removed, taken away and reconstructed or re-erected. Any Certificate given by the Engineer relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s), or by the final certificate, and shall not by itself, be conclusive evidence that any work or materials to which it relates is / are in accordance with the Contract and Specification. Any such interim payment or any part thereof shall not in any respect conclude, determine, or affect, in any way the powers of the Engineer under the Contract or any of such payments be treated as final settlement and adjustment of accounts, or in any way vary, or affect the contract or right of the Employer under the

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement		
	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.  terms of the Contract.		
		14.2.3.	Payment for works:	
			vive payment shall be made on monthly running account bills.	
		Engineer shall certify the running account bills within 7 days from the date of		
		Liigiileei	submission of bills in complete shape by the Contractor with all required enclosures, attachments etc 80% of the payment will be paid within 15 days from the date of certification of engineer and balance 20% payment will be made within 30 days from the date of certification of bills by the Engineer and due scrutiny by CMRL.	
		14.3.	Final Bill:	
		14.3.1.	The Contractor shall submit his final bill for the works within a month of completion of works. The bill shall be based only on works as measured and at accepted agreement rates, including rates for any additional or extra work, which might have been sanctioned by the Employer. All deductions due under the Contract shall be made.	
		14.3.2.	Final bill Payment:	
		a.	Final bill shall be submitted by the Contractor, within a month from the date of completion of all the works.	
		b.	The Employer shall certify the final bill within a month of submission in complete shape with all the required documents, subject to finalisation of extra claims, if any.	
		C.	The Employer shall make payment for the final bill within 60 days from the date of certification of final bill by the Employer.	
		14.3.3.	Deduction in Final bill :	
		a.	Applicable deductions as per Conditions of Contract.	
		b.	Any money recoverable from the Contractor.	
		c.	All interim payments effected.	
		2.50.	Delayed Payment:	
		No intere	est is payable on Delayed Payments.	
		14.4.	Payment of Retention Money:	
			In addition to the Performance Bond/Performance Guarantee in the form of Bank Guarantee as required under Clause No.4.2 above, as a further security for the due fulfilment of the contract by the Contractor, 2.5% of the value of the work done will be deducted by the Employer from each payment to be made to the Contractor until the retention money amounts to a maximum of 5% of the contract sum of the work.	
			Upon the Engineer's certificate of completion of the works, 50% of the retention money would be refunded and the balance after due completion of	

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement		
01 1101	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.		
		all obligations under the contract agreement and defects liability period. The amounts retained		
		by the Employer shall not bear interest.		
SP 23	15.1 Notice to	This should be read as under:		
	Correct	15.1 Notice to Correct		
		<b>15.1.1.</b> If the Contractor fails to carry out any obligation under the Contract, the Engineer may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.		
		<b>15.1.2.</b> In addition, the Engineer may also, by notice, require the Contractor to make good the following failures within a specified reasonable time:		
		<ul> <li>(a) The contractor abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,</li> <li>(b) The contractor without reasonable excuse, fails:</li> </ul>		
		(i) to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or		
		(ii) to comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 28 days after receiving it,		
		(c) The contractor, subcontracts the whole of the Works or assigns the Contract without the required agreement.		
SP 24	15.2	This should be read as under:		
	Termination By Employer	The Employer shall be entitled to terminate the Contract if the Contractor:		
		(a) fails to comply with Sub-Clause 4.2 [Performance Security] or with a notice under Sub-Clause 15.1 [Notice to Correct],		
		(b) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or		
		(c) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:		

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.	
		(i) for doing or forbearing to do any action in relation to the Contract, or	
		<ul> <li>(ii) for showing or forbearing to show favour or disfavour to any person in relation to the Contract,</li> <li>(d) fails to comply with subclause 1.6 [Contract Agreement] or sub clause 1.7 [Assignment].</li> </ul>	
		or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (c). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination.	
		In any of these events or circumstances, the Employer may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in the case of sub-paragraph (b) or (c), the Employer may by notice terminate the Contract immediately	
		The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.	
		The Contractor shall then leave the Site and deliver any required Goods, all Contractor's Documents, and other design documents made by or for him, to the Engineer. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.	
		After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor.	
		The Employer shall then give notice that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site. The Contractor shall promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.	

SP No.	No. Section VII-GC Sub-Clause No. The following Clauses in this Part B – Particular Conditions supplemental Sub-Clause No. Section VII General Conditions, unless otherwise stated.	
SP 25	16.1 Contractor's Entitlement to Suspend Work	16.1.1 If the Engineer fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.
		<b>16.1.2</b> The contractor can also notice the Engineer in the following case requiring the Engineer to make good the failure and to remedy it within a specified reasonable time.
		(a) In case if the Employer substantially fails to perform his obligations under the Contract in such manner as to materially and adversely affect the economic balance of the Contract and/or the ability of the Contractor to perform the Contract,
		The Contractor's action shall not prejudice his entitlements to financing charges under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].
		If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.
		If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:
		(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and
		(b) payment of any such Cost plus profit, which shall be included in the Contract Price.
		After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.
SP 26	16.2	The Contractor shall be entitled to terminate the Contract if:
	Termination by Contractor	(a) The Contractor does not receive the reasonable evidence within 42 days after giving notice under sub-clause 16.1.1 [Contractor's Entitlement to Suspend Work] or under sub-clause 16.1.2.,
		(b) The Employer fails to comply with Sub-Clause 1.6 [Contract

SP No.	Section VII-GC	The following Clauses in this Part B – Particular Conditions supplement			
SP NO.	Sub-Clause No.	Section VII General Conditions, unless otherwise stated.			
		Agreement] or Sub-Clause 1.7 [Assignment],			
		(c) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or			
		(d) the Employer becomes bankrupt or insolvent, goes into liquidation has a receiving or administration order made against him compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.			
		(e) the Contractor does not receive the Engineer's instruction recording the agreement of both Parties on the fulfilment of the conditions for the Commencement of Works under Sub-Clause 8.1 [Commencement of Works]".			
		In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub-paragraph (d) or (e), the Contractor may by notice terminate the Contract immediately.  The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.			

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.  In para no. 4, Replace 84 days with 150 days.	
SP 27	20.4 Obtaining Dispute Board's Decision		
SP 28	20.6	Delete sub-clause 20.6 of Part 3 General Conditions in its entirety and replace with the following sub-clauses.	
	Arbitration.	20.6.1 Arbitration.	
		Any dispute in respect of which:	
		(a) the decision, if any, of the Dispute Adjudication Board has not become final and binding pursuant to Sub-clause 20.4, and	
		(b) amicable settlement has not been reached, shall be finally settled by arbitration. The arbitration rules under which the arbitration is conducted, the institution to administer the arbitration rules (unless named therein), the number of arbitrators, and the language and place of such arbitration shall be as set out in PC Part- A Section-VIII. The arbitrator(s) shall have full power to open up, review and revise any decision of the Dispute Adjudication Board, relevant to the dispute.	
		Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the Dispute Adjudication Board to obtain its decision. Any decision of the Dispute Adjudication Board shall be admissible in evidence in the arbitration.	
		Arbitration may commence during the construction of the Works or after completion of the Works. The obligations of the Parties and the Dispute Adjudication Board shall not be altered by reason of any arbitration being conducted during the progress of the Works.	
		20.6.2 Settlement of Disputes.	
		If a dispute of any kind whatsoever arises between the Engineer and the Contractor in connection with or arising out of the Contract or the carrying out of the Works, including any dispute as to any decision, notice of no objection, opinion, instruction, direction, determination, certificate or valuation of the Engineer (whether during the progress of the Works or after their completion and whether before or after the determination, abandonment or breach of the Contract) it shall be settled in accordance with Clause 20.4.	
		20.6.3 Application for Arbitration.	
		Either party is entitled to apply for Arbitration to resolve any dispute/s	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.	
		on the happening of any of the following events:	
		(a) If the dispute/s have already been subject to adjudication in accordance with clause 20.4 and a notice having been served pursuant to clause 20.4 and 20.5 above, or	
		(b) The parties have agreed to waive adjudication, or	
		(c) Either party has terminated the contract in terms of clause 15 or clause 16 as the case may be, or	
		(d) A declaration has been made by any of the Indian courts that the findings of the DAB on the dispute were procured by fraud or dishonesty, or	
		(e) In the case of a dispute arising from the exercise of any of the rights by the Engineer under clause 12 of GCC.	
		Within 56 days of receipt of such re-occurrence either party may apply for arbitration to the other party under notice.	
		20.6.4 20.6.4 Arbitration Procedure:	
		The parties agree on the following procedure for appointing the arbitrator / arbitrators:	
		20.6.4.1 Either Party may make a request to the other Party for referring the dispute to Arbitration. If the request is initiated by the Contractor, such request shall be addressed to the Employer and the Employer shall, within fifteen days from the date of receipt of such request, shall send names of five independent persons to be nominated as Arbitrators. Such independent persons shall meet with the requirement relating to the independence or impartiality of arbitrators referred to in the Fifth and Seventh schedules, read with Sub-sections 12 (1) (a), (b) and (5) of the Arbitration and Conciliation Act, 1996 as amended by the Arbitration and Conciliation (Amendment) Act 2015. While forwarding the names to the Contractor, the Employer shall also nominate one among such persons, as its nominee-arbitrator. The Contractor shall nominate an arbitrator from the remaining 4 names within fifteen days from the date of receipt of the names from the Employer.	
		<b>20.6.4.2</b> If the request for referring the dispute to Arbitration is made by the Employer to the Contractor, it shall forward such request to the Contractor along with the names referred to in clause 20.6.4.1 above, with nomination of its Arbitrator, who shall be one among such names. The Contractor, shall within fifteen days of receipt of the names from the Employer, shall	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.	
		nominate its arbitrator from the names given pursuant to 20.6.4.1 and communicate its nomination to the Employer.	
		<ul> <li>20.6.4.3 If either party fail to nominate its arbitrator within the prescribed time limit, as mentioned above, after the nomination by the other party, then such other party, after the expiry of the prescribed time limit, shall nominate the arbitrator from the names given pursuant to clause 20.6.4.1 above, on behalf of the party failing to nominate.</li> <li>20.6.4.4 The two arbitrators nominated by the Contractor and the Employer, in terms of paragraph 20.6.4.1, 20.6.4.2 or 20.6.4.3 above shall appoint the Presiding Arbitrator from the names given pursuant to clause 20.6.4.1.</li> </ul>	
		<b>20.6.4.5</b> If no consensus is reached within 15 days regarding the appointment of the Presiding Arbitrator, either party may apply to the Designated Court referred to in the Arbitration and Conciliation Act, 1996 as amended by the Arbitration and Conciliation (Amendment) Act 2015 for the appointment of the Presiding Arbitrator.	
		20.6.5 Rules.	
		(i) Arbitration shall be conducted in accordance with the Arbitration Law and other applicable laws and regulations of the Indian Arbitration and Conciliation Act 1996, and amendment ordinance 2015, except to the extent they are inconsistent with or modified by these Clauses.	
		(ii) The place of Arbitration shall be Chennai, and the language shall be English.	
		20.6.6 Arbitration Award.	
		The award in the arbitration shall be binding on the parties and shall finally and exclusively settle the dispute subject to the arbitral award.	
		20.6.7 Witnesses.	
		(a) No decision, statement of no objection, opinion, consent, approval, instruction, direction, determination, certificate, or valuation given by the Engineer shall disqualify him from being called as a witness and giving evidence before the Dispute Adjudication Board or Arbitrators on any matter whatsoever relevant to the dispute.	
		(b) All matters and information placed before the Dis Adjudication Board pursuant to a reference to <u>adjudication us</u> <u>Clause 20</u> , shall be deemed to be submitted to him confident and without prejudice, and the Adjudicator shall not be called	

SP No.	Section VII-GC Sub-Clause No.	The following Clauses in this Part B – Particular Conditions supplement Section VII General Conditions, unless otherwise stated.
		witness by the parties or anyone claiming through them in connection with any arbitration or other legal proceedings arising out of or connected with any matter referred to him. Any findings of the Adjudicator shall also be kept confidential and deemed without prejudice, save to the extent necessary for any interim enforcement of the Adjudicator's findings pursuant to Clause 20.4, and shall not by way of example, and without limitation be referred to in any arbitration.
		20.6.8 Condition Precedent for Arbitration.
		It shall be a condition precedent to either party being entitled to apply for and proceed with arbitration, that:
		<ul> <li>(a) The dispute to be subject to the arbitration was the subject of earlier adjudication under Clause 20 or the parties by agreement waived adjudication, and</li> </ul>
		(b) A notice was served on the Engineer or the Contractor as the case may be within the time required in Clause 20.5.
		20.6.9 Period for Reference.
		Subject only to the Contractor's right to issue a notice pursuant to Clause 20.4 and in all other circumstances should the Contractor fail to issue a notice within 30 days of the issuing of the Performance Certificate for the Whole of the Works in accordance with Clause 12.9, or termination of the Contract pursuant to Clause 15 or Clause 16 if earlier, then the Contractor shall be deemed to have waived his right to refer any dispute or matter of whatsoever nature in regard to the Contract to adjudication, arbitration, or to any review by the Courts in Chennai, in any jurisdiction or have any decision, statement of no objection, opinion, consent, approval, instruction, direction, certificate or valuation given by or on behalf of the Engineer or the Engineer challenged, reviewed, changed or reopened in any way whatsoever.
SP 29	4.12	Replace the clause 4.12 with the following:
	Unforeseeable Physical conditions	The contractor shall ascertain itself of the ground conditions duly visiting the site and by way of investigations on its own and nothing extra shall be payable on account of any changes in ground conditions.

# Section IX Annex to the Particular Conditions Contract Forms

## **Table of Forms**

Letter of Acceptance
[Option A: Single-Stage Two-Stage Bidding]
Contract Agreement
Performance Security
Advance Payment Security
Retention Money Security
Litigation History
Undertaking for Blacklisting/De-Registration
Undertaking for Not Being Penalised in a Contract

## **Letter of Acceptance**

[Insert letterhead paper of the Employer]

[Insert date]

To: [Insert name and address of the Contractor]

- 1. This is to notify you that your Bid dated [insert date] for execution of the [insert name of the Contract and identification number, as given in the Contract Data] for the Accepted Contract Amount of the equivalent of [insert amount in words and figures] [insert name of currency], as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.
- 2. You are requested to furnish the Performance Security within 7 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section IX, Annex to the Particular Conditions Contract Forms, of the Bidding Documents.
- 3. The completion period is 60 days from commencement date.
- 4. This letter of acceptance will deemed to be an agreement till the formal agreement is executed.
- 5. The LOA is sent in duplicate, you may please return on copy duly signed immediately.

Authorized Signature:
lame and Title of Signatory:
lame of Agency:

Attachment: Contract Agreement

## **Contract Agreement**

THIS AGREEMENT made the [insert day] day of [insert month], [insert year], between [insert name of the Employer] (hereinafter "the Employer"), of the one part, and [insert name of the Contractor] (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as [name of the Contract] should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
  - a. Letter of Acceptance (LoA)
  - b. The Letter of technical and financial bid
  - c. Letters of Clarifications (LoC), if any
  - d. Addenda to the Tender document, if any
  - e. Contract Documents
    - (i) Part-3 Section VIII Particular Conditions Part-A and Part-B
    - (ii) Part-3 Section VII General Conditions
    - (iii) Part-1 Qualification criteria
    - (iv) Part-2- Bill of Quantities
    - (v) Contractor's Proposal
    - (vi) Any other Documents
- 3. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the laws of the borrowing country]* on the day, month and year specified above.

Signed by	Signed by
for and on behalf of the Employer	for and on behalf the Contractor
in the presence of	in the presence of
Witness:	Witness:
Name:	Name:
Signature:	Signature:
Address:	Address:
Nate:	Date:

unequivocal.

## **Performance Security**

**Option 1: (Demand Guarantee)** 

## FORM OF PERFORMANCE SECURITY (GUARANTEE) BY BANK

(Refer Sub-Clause F5 of "Instructions to Tenderers")

1.	This deed of Guarantee made this day of of (hereinafter called the "Bank") of the one part, and Chennai Me (hereinafter called "the Employer") of the other part.	
2.	Whereas Chennai Metro Rail Limited, has awarded the contract for work as per the title page of the NIT) (hereinafter called the Contract) to (Name of the Contractor) hereinafter called the Contractor)	
3.	AND WHEREAS the Contractor is bound by the said Contract to submit a Performance Security for a total amount of currencies and their amounts in figures and words).	
4.		for and on _(Full name of
5.	all currencies and their amounts in figures and words) as stated above. After the Contractor has signed the aforementioned Contract with the Bank is engaged to pay the Employer, any amount up to and aforementioned full amount upon written order from the Employer Employer for any liability of damage resulting from any defects or shortcombractor or the debts he may have incurred to any parties involved in the Contract mentioned above, whether these defects or shortcombractual or estimated or expected. The Bank will deliver the money Employer immediately on demand without delay and demur and without Contractor and without the necessity of a previous notice or of judicial procedures and without it being necessary to prove to the Bank the liab resulting from any defects or shortcomings or debts of the Contractor	inclusive of the to indemnify the ortcomings of the the Works under ags or debts are required by the treference to the or administrative bility or damages

pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this guarantee shall be absolute and

- - 7. At any time during the period in which this Guarantee is still valid, if the Employer agrees to grant a time extension to the Contractor or if the Contractor fails to complete the Works within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages or debts as stated under Sub-Clause 5 above, it is understood that the Bank will extend this Guarantee under the same conditions for the required time on demand by the Employer and at the cost of the Contractor. The Guarantee hereinbefore contained shall not be affected by any change in the Constitution of the Bank or of the Contractor.
  - 8. The neglect or forbearance of the Employer in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the bank of their liability under this deed.
  - 9. The expressions "the Employer", "the Bank" and "the Contractor" hereinbefore used shall include their respective successors and assigns.
  - 10. Notwithstanding anything contained herein:

a) (	Our liability under	this Bank Guarantee shall	not exceed	(Specify
а	all currencies and	their amounts in figures a	and words), and	
b) T	Γhis Bank Guarar	ntee shall be valid up to		, and
, (	Guarantee only &		unt or part thereof under this a written claim or demand on o	
In wit	tness whereof I/	We of the bank have sig	ned and sealed this Guarant	ee on
	orized.	(day) of	(Month) <b>2016</b> being here	with duly
For and on	behalf of			
The	E	Bank.		
Signature o	of Authorized Ban	k official		
Name:				

Designation:	
Stamp/Seal of the Bank :	
Signed, sealed and delivered for and on behalf of the	
Bank by the above	
Named in the presence	of:
Witness 1	Witness 2.
Signature	Signature
Name	Name
Address	Address

## FORMAT OF BANK GUARANTEE FOR RETENTION MONEY

#### **BANK GUARANTEE**

I	Bank Guarantee No.:
I	Bank Guarantee Date:
1.	This guarantee made on this <u>(date)</u> day of <u>(month)</u> , of <u>(year)</u> , by <u>(Bank)</u> registered under the laws of India having corporate office at <u>(Address)</u> , and branch office at <u>(Address)</u> (hereinafter called the "Bank") in favor of (hereinafter called the "Employer").
2.	Whereas <u>(Employer)</u> has awarded the contract dated <u>(date)</u> for <u>(Contract Name)</u> , (herein after called the contract) to M/s (hereinafter called the "Contractor").
3.	And whereas the Employer has agreed not to recover retention money of INR (Amount in figures) (Amount in words) from the running bills for which the contractor agreed to submit the Bank Guarantee to the Employer.
4.	Now we, (Bank), hereby declare that the said bank will guarantee the employer the full amount not exceeding INR (Amount in figures) , ( Amount in words ) that made up percent of retention money.
5.	The bank is engaged to pay the Employer, any amount up to and inclusive of the afore mentioned amount upon receipt of written demand on or before <a href="mailto:(date)">(date)</a> from the employer and to indemnify to the extent of INR <a href="mailto:(Amount)">(Amount)</a> to the Employer for any liability of the damage resulting from the applicant of retention money payment made by the Employer. The bank will deliver the money required by the Employer immediately on return demand received on or before <a href="mailto:(date)">(date)</a> , without delay demur and without reference to the contractor or applicant and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the bank the liability of the applicant. The bank shall pay to the Employer money so

demanded not withstanding any dispute/disputes raised by the contractor or applicant in any suit or proceedings pending before any court, tribunal or arbitrator/s relating thereto and liability under this guarantee shall be absolute and unequivocal.

<ol><li>This guarantee is valid until</li></ol>	(date)	
-------------------------------------------------	--------	--

- 7. At any time during this period the guarantee is still valid, if the Employer agrees to grant a time extension to the Contractor or if the Contractor fails to complete the work within the time for completion as stated in the contract, It is understood that the bank will extend this guarantee under the same conditions for the required time on instruction by the applicant and at the cost of the applicant.
- 8. The guarantee here in before contained shall not be affected any change in the constitution of the bank or the contractor.
- 9. The neglect or forbearance of Employer in enforcement of payment of any moneys, the payment whereof if intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the bank of their liability under this duty.
- 10. The expressions of the bank/the applicant and the contractor herein before used shall include the respective successor and assigns.

#### 11. <u>Notwithstanding anything contained herein:</u>

(a)	Our liability un	der this bank g	uarantee sh	all not excee	ed INR	(Amount)
(b)	This bank gua	rantee shall be	valid upto _	(date)	<u>,</u> and	
(c)	We are liable guarantee only i	to pay the gua f Chennai Metro		•		
	on or before	(Date)	at	(Add	dress)	•

In witness whereof we	and	of the _	have
signed and sealed this	guarantee on the	e <u>(Date)</u>	of <u>(Month)</u>
of <u>(Year)</u> being he	rewith duly authorized	d.	
Date:			
Place:			
Signature of Authorized b	ank official:		
1) Witness		2) Witnes	S
Signature:		Signature:	
Name :		Name :	
Address :		Address	:

**ANNEXURE** 

# **Litigation History**

Details pertaining to litigation history over a 10 year period (last 10 years starting from 01-02-2006 and ending 30-06-2016 )

Name of Tenderer (Member in case of group):

f group/ period c 30-06-2 s pertain sary) with	jv), completed of last 10 years, 2016 ing to litigation	r's stamp				
Year	State whether the litigation or Arbitration initiated/Log ged by the Tenderer or by the Client and what is final outcome and status of the matter	Award in favour of Tenderer	Award against Tenderer	Name of the Client, Cause of Litigatio n, and the matter in Dispute	Disputed Amount INR in Millions	Whether any of (i) the Litigation started by the Tenderer without recourse to Arbitration or (ii) the Litigation as post award of Arbitration challenged by the Tenderer
	f group/ period og 30-06-2 s pertain sary) with	f group/ jv), completed period of last 10 years, a 30-06-2016  s pertaining to litigation fary) with signature of the litigation or Arbitration initiated/Log ged by the Tenderer or by the Client and what is final outcome and status of the	f group/ jv), completed or ongoing period of last 10 years, starting from 3 30-06-2016  s pertaining to litigation history as party) with signature of the authorize ary) with signature of the authorize ary) with signature of the authorize ary and status of the	f group/ jv), completed or ongoing under its experiod of last 10 years, starting from 01-07-20 g 30-06-2016  s pertaining to litigation history as per the form sary) with signature of the authorized person a year of litigation or Arbitration initiated/Log ged by the Tenderer or by the Client and what is final outcome and status of the	f group/ jv), completed or ongoing under its execution, period of last 10 years, starting from 01-07-2006 and 30-06-2016  s pertaining to litigation history as per the format provided sary) with signature of the authorized person and tendere  Year State Award in favour of Itigation or Arbitration initiated/Log ged by the Tenderer or by the Client and what is final outcome and status of the	period of last 10 years, starting from 01-07-2006 and 30-06-2016  spertaining to litigation history as per the format provided below (or in a sary) with signature of the authorized person and tenderer's stamp  Year State Award in favour of litigation or Arbitration initiated/Log ged by the Tenderer Or by the Client and what is final outcome and status of the authorized person and tenderer's stamp  Disputed Amount INR in Cause of Litigatio n, and the matter in Dispute

#### Note:

• Separate sheet may be attached to provide more information on particular case/ matter.

#### **FORM OF TENDER APENDIX**

#### **UNDERTAKING FOR Blacklisting / deregistrat**ion

We do hereby undertake that none of the Central / State Government Department / Public Sector Undertaking / Other Government entities or local body has banned business with us as on the date of tender submission .Also none of the work has been rescinded / terminated by Delhi / Bangalore / Chennai / Jaipur / Mumbai Metro project after award of contract to us during last 10 years due to our non-performance.

Date	:	Stamp & Signature of authorized signatory of
Place	:	Tenderer

#### **FORM OF TENDER APENDIX**

## (UNDERTAKING FOR NOT BEING PENALISED IN A CONTRACT)

We do hereby undertake that we have not paid liquidated damages of 10% (or more) of th
contract value in a contract due to delay or penalty of 10% (or more) of the contract value due t
any other reason during last five years.

Date	:	Stamp & S Tenderer	Signature	of authorized	signatory o
Place	i				

	Labour/Wage Register							
Name of the contractor:								
		ct Package:						
S.No	Date		Vame	Category	Wages	Signature/Thumb impression of the labourer		

	Format-B  Equipment Register									
N	Name of the contractor:									
1	Contract Package:									
S.No	Date	Name		Hire	Own	Storage location				

				Material Registe	er	Format-C
		Name of the	contractor:			
			ct Package:			
S.No	Date of Material received at site	Invoice reference		Name	Quantity of Material Procured	Storage location/Dispatch location
A	В	С		D	Е	F

				Mate	rial Register			Format-C
	Name of the				Ü			
	Contrac	et Package:		1				
S.No	Date	]	Name	Quantity of Material availble in previous stock	Quantity of Material consumed in previous stock	Quantity of Material procured in new stock	Quantity of Material avaialble as on Date	Storage location
A	В		D	Е	G	Н	J=(E-G)+H	

				Work Pe	rmit/Cance	llation Register			Format-D
N		contractor:							
	Contra	ct Package:							
S.No	Date	Station	Permit to V	Permit to Work		Permit to work Car	Permit to work Cancellation		
		Name	Sl.No	Time	Pg.No	Sl.No	Time	Pg.No	attended under Work permit