



ΓΕΝΙΚΟ ΠΡΟΞΕΝΕΙΟ ΤΗΣ ΕΛΛΑΔΟΣ
στον Άγιο Παύλο Βραζιλίας
ΓΡΑΦΕΙΟ ΟΙΚΟΝΟΜΙΚΩΝ ΚΑΙ
ΕΜΠΟΡΙΚΩΝ ΥΠΟΘΕΣΕΩΝ

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ΕΠΕΙΓΟΝ – ΠΡΟΘΕΣΜΙΑ 13/1/2016

Άγιος Παύλος, 26 Νοεμβρίου 2015
Α.Π.: Φ 2121/275

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ΤΗΛΕΑΝΤΙΓΡΑΦΗΜΑ

Θέμα: Διαγωνισμός επέκτασης μετρό Αγίου Παύλου, Βραζιλία, με χρηματοδότηση IBRD

Η εταιρία διαχείρισης του μετρό της πόλης του Αγίου Παύλου, Companhia do Metropolitano de São Paulo – Metrô, δημοσίευσε προκήρυξη διεθνούς διαγωνισμού για την εκτέλεση εργασιών ολοκλήρωσης της δεύτερης φάσης της γραμμής 4 του μετρό της πόλης, που περιλαμβάνουν την ολοκλήρωση τεσσάρων επιβατικών σταθμών και ενός για τη στάθμευση και συντήρηση των συρμών. Το έργο συγχρηματοδοτείται από τη Διεθνή Τράπεζα Ανασυγκρότησης και Ανάπτυξης.

Ημερομηνία υποβολής προσφορών: 13 Ιανουαρίου 2016 μέχρι τις 10:00 τοπική ώρα.

Τόπος υποβολής προσφορών και στοιχεία επικοινωνίας για διευκρινίσεις:

Gerência de Contratações e Compras – GCP
Rua Boa Vista, 175
2º andar – Bloco B
São Paulo, 01014-001, Brazil
email: sapereira@metrosp.com.br and rmaricawa@metrosp.com.br

Η προκήρυξη επισυνάπτεται (στην αγγλική γλώσσα). Αναλυτικά τεύχη είναι διαθέσιμα στην ιστοσελίδα <https://aplic.metrosp.com.br/as0001/frontend/index.php/processo/index> υπό τον τίτλο «EXECUTION OF CIVIL WORKS, STRUCTURAL WORKS AND FINISHING SERVICES, CONTEMPLATING THE REMAINING WORKS FOR THE CONCLUSION OF LINE 4 YELLOW - PHASE 2 OF SAO PAULO METRO» (δεύτερη στήλη πίνακα).

Σημειώνεται ότι τον Ιούλιο η εταιρία Metrô έλυσε μονομερώς τη σύμβαση με την κοινοπραξία Corsan-Corviam για την κατασκευή της φάσης 2 της γραμμής 4, λόγω μη εκπλήρωσης των υποχρεώσεών της.

Η ανακοίνωση έχει αναρτηθεί και στην ιστοσελίδα του Γραφείου ΟΕΥ Αγίου Παύλου στην πύλη Agora: www.agora.mfa.gr/br119.

Παρακαλούμε για την ενημέρωση των επιχειρήσεων – μελών σας.

Η Διευθύνουσα

Γεωργία Βελέντζα
Γραμματέας ΟΕΥ Α΄

Συν.: 1 ηλεκτρονικό αρχείο

Date: November, 23rd, 2015
BRAZIL
LINE 4 YELLOW – PHASE 2
Loan No: 7869-BR
ICB No: **41075213**

The **GOVERNMENT OF THE STATE OF SÃO PAULO** has received financing from the World Bank toward the cost of **LINE 4 YELLOW – PHASE 2** and intends to apply part of the proceeds toward payments under the contract for **EXECUTION OF CIVIL WORKS, STRUCTURAL WORKS AND FINISHING SERVICES, CONTEMPLATING THE REMAINING WORKS FOR THE CONCLUSION OF LINE 4 YELLOW - PHASE 2 OF SAO PAULO METRO.**

The **COMPANHIA DO METROPOLITANO DE SÃO PAULO - METRÔ** now invites sealed bids from eligible bidders for the **EXECUTION OF CIVIL WORKS, STRUCTURAL WORKS AND FINISHING SERVICES, CONTEMPLATING THE REMAINING WORKS FOR THE CONCLUSION OF LINE 4 YELLOW - PHASE 2 OF SAO PAULO METRO.**

Bidding will be conducted through the International Competitive Bidding procedures as specified in the World Bank's [*Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*](#) ("Procurement Guidelines"), and is open to all eligible bidders as defined in the Procurement Guidelines. In addition, please refer to paragraphs 1.6 and 1.7 setting forth the World Bank's policy on conflict of interest.

Interested eligible bidders may obtain further information and inspect the bidding documents during office hours [*from 9 a.m to 11:30 a.m and from 1:30 p.m to 4:30 p.m*] at the address given below from November 26th, 2015 until January 12th, 2016.

Attention: **Gerência de Contratações e Compras – GCP**
Street Address: **Rua Boa Vista, 175**
Floor/Room number: **2º andar – Bloco B**
City: **São Paulo**
ZIP Code: **01014-001**
Country: **Brazil**
Electronic mail addresses: sapereira@metrosp.com.br and rmaricawa@metrosp.com.br

A complete set of bidding documents may be obtained free of charge on the website www.metro.sp.gov.br, or by paying R\$ 10,00 to obtain the CD-R version at the address above.

Bids must be delivered to the above office on or before **10 a.m** on **January, 13th, 2016**. Electronic bidding *will not* be permitted. Late bids will be rejected. Bids will be publicly opened in the presence of the bidders' designated representatives and anyone who choose to attend at **10 a.m. on January, 13th, 2016** at the address mentioned above.

All bids must be accompanied by a Bid Security of R\$13.800.000,00.

LUIS ALBERTO FERREIRA DIAZ
Gerente de Contratações e Compras

BIDDING DOCUMENTS

for

EXECUTION OF CIVIL WORKS, STRUCTURAL WORKS AND FINISHING SERVICES, CONTEMPLATING THE REMAINING WORKS FOR THE CONCLUSION OF LINE 4 YELLOW - PHASE 2 OF SAO PAULO METRO.

ICB No: 41075213

Project: *LINE 4 – YELLOW – PHASE 2*

Employer: *COMPANHIA DO METROPOLITANO DE SÃO PAULO – METRÔ*

Country: *Brazil*

Issued on: November 24th 2015

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PART 1 – BIDDING PROCEDURES

Section I. Instructions to Bidders

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Section I. Instructions to Bidders

A. General

1. **Scope of Bid**
 - 1.1 In connection with the Invitation for Bids specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues these Bidding Documents for the procurement of Works as specified in Section VII, Works Requirements. The name, identification, and number of lots (contracts) of this International Competitive Bidding (ICB) process are specified in the BDS.
 - 1.2 Throughout these Bidding Documents:
 - (a) the term “in writing” means communicated in written form and delivered against receipt;
 - (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
 - (c) “day” means calendar day.
2. **Source of Funds**
 - 2.1 The Borrower or Recipient (hereinafter called “Borrower”) **specified in the BDS** has received or has applied for financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called “the Bank”) in an amount **specified in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which these Bidding Documents are issued.
 - 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the Loan (or other financing) account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or

other financing).

3. Corrupt and Fraudulent Practices

3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section VI.

3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit the Bank to inspect all accounts, records and other documents relating to any prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

4.1 A Bidder may be a firm that is a private entity, a government-owned entity—subject to ITB 4.5—or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution. **Unless specified in the BDS**, there is no limit on the number of members in a JV.

4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:

- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- (b) receives or has received any direct or indirect subsidy from another Bidder; or
- (c) has the same legal representative as another Bidder; or
- (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) participates in more than one bid in this bidding process.

Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or

- (f) any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the bid; or
- (g) any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Engineer for the Contract implementation; or
- (h) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
- (i) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.

4.3 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.7. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.

4.4 A Bidder that has been sanctioned by the Bank in accordance with the above ITB 3.1, including in accordance

with the Bank's Guidelines on Preventing and Combating Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants ("Anti-Corruption Guidelines"), shall be ineligible to be prequalified for, bid for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available as **specified in the BDS**.

- 4.5 Bidders that are Government-owned enterprises or institutions in the Employer's Country may participate only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not dependent agencies of the Employer. To be eligible, a government-owned enterprise or institution shall establish to the Bank's satisfaction, through all relevant documents, including its Charter and other information the Bank may request, that it: (i) is a legal entity separate from the government (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to the government, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt; and (iv) is not bidding for a contract to be awarded by the department or agency of the government which under their applicable laws or regulations is the reporting or supervisory authority of the enterprise or has the ability to exercise influence or control over the enterprise or institution.
- 4.6 A Bidder shall not be under suspension from bidding by the Employer as the result of the operation of a Bid-Securing Declaration.
- 4.7 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.

- 4.8 This bidding is open only to prequalified Bidders unless **specified in the BDS.**
- 4.9 A Bidder shall provide such evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 5. Eligible Materials, Equipment, and Services**
- 5.1 The materials, equipment and services to be supplied under the Contract and financed by the Bank may have their origin in any country subject to the restrictions specified in Section V, Eligible Countries, and all expenditures under the Contract will not contravene such restrictions. At the Employer's request, Bidders may be required to provide evidence of the origin of materials, equipment and services.

B. Contents of Bidding Documents

- 6. Sections of Bidding Documents**
- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bid Data Sheet (BDS)
- Section III. Evaluation and Qualification Criteria
- Section IV. Bidding Forms
- Section V. Eligible Countries
- Section VI. Bank Policy-Corrupt and Fraudulent Practices

PART 2 Works Requirements

- Section VII. Works Requirements

PART 3 Conditions of Contract and Contract Forms

- Section VIII. General Conditions (GC)
- Section IX. Particular Conditions (PC)
- Section X. Contract Forms

- 6.2 The Invitation for Bids issued by the Employer is not part of the Bidding Documents.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the Bidding Documents, responses to requests for clarification, the

minutes of the pre-Bid meeting (if any), or Addenda to the Bidding Documents in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Employer shall prevail.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its bid all information and documentation as is required by the Bidding Documents.

7. Clarification of Bidding Documents, Site Visit, Pre-Bid Meeting

7.1 A Bidder requiring any clarification of the Bidding Documents shall contact the Employer in writing at the Employer's address **specified in the BDS** or raise its enquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received no later than fourteen (14) days prior to the deadline for submission of bids. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified in the BDS, the Employer shall also promptly publish its response at the web page identified in the BDS. Should the clarification result in changes to the essential elements of the Bidding Documents, the Employer shall amend the Bidding Documents following the procedure under ITB 8 and ITB 22.2.

7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

7.4 If so specified in the BDS, the Bidder's designated representative is invited to attend a pre-bid meeting. The purpose of the meeting will be to clarify issues and to

answer questions on any matter that may be raised at that stage.

- 7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than one week before the meeting.
- 7.6 Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by Bidders, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3. Any modification to the Bidding Documents that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting. Nonattendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

8. Amendment of Bidding Documents

- 8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Documents by issuing addenda.
- 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents from the Employer in accordance with ITB 6.3. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 7.1.
- 8.3 To give Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer should extend the deadline for the submission of bids, pursuant to ITB 22.2

C. Preparation of Bids

9. Cost of Bidding

- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

10. Language of Bid

- 10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are

accompanied by an accurate translation of the relevant passages in the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

11.1 The Bid shall comprise the following:

- (a) Letter of Bid and Appendix to Bid, in accordance with ITB 12;
- (b) completed schedules as required, including priced Bill of Quantities, in accordance with ITB 12 and 14;
- (c) Bid Security or Bid-Securing Declaration, in accordance with ITB 19.1;
- (d) alternative bids, if permissible, in accordance with ITB 13;
- (e) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2;
- (f) documentary evidence in accordance with ITB 17 establishing the Bidder's continued qualified status or, if post-qualification applies, as specified in accordance with ITB 4.8, the Bidder's qualifications to perform the contract if its Bid is accepted;
- (g) Technical Proposal in accordance with ITB 16; and
- (h) any other document **required in the BDS**.

11.2 In addition to the requirements under ITB 11.1, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.

11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Letter of Bid and Schedules

12.1 The Letter of Bid and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.2. All blank spaces shall be filled in with the information

requested.

13. Alternative Bids

- 13.1 **Unless otherwise specified in the BDS**, alternative bids shall not be considered.
- 13.2 When alternative times for completion are explicitly invited, a statement to that effect **will be included in the BDS**, as will the method of evaluating different times for completion.
- 13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the requirements of the Bidding Documents must first price the Employer's design as described in the Bidding Documents and shall further provide all information necessary for a complete evaluation of the alternative by the Employer, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the lowest evaluated Bidder conforming to the basic technical requirements shall be considered by the Employer.
- 13.4 **When specified in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Works, and such parts **will be identified in the BDS**, as will the method for their evaluating, and described in Section VII, Works Requirements.

14. Bid Prices and Discounts

- 14.1 The prices and discounts (including any price reduction) quoted by the Bidder in the Letter of Bid and in the Bill of Quantities shall conform to the requirements specified below.
- 14.2 The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by the Employer. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Bid, and provided that the Bid is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive bidders will be added to the bid price and the equivalent total cost of the bid so determined will be used for price comparison.
- 14.3 The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the Bid, excluding

any discounts offered.

14.4 The Bidder shall quote any discounts and the methodology for their application in the Letter of Bid, in accordance with ITB 12.1.

14.5 **Unless otherwise specified in the BDS** and the Contract, the rates and prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract. In such a case, the Bidder shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and the Employer may require the Bidder to justify its proposed indices and weightings.

14.6 If so specified in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4, provided the bids for all lots (contracts) are opened at the same time.

14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.

15. Currencies of Bid and Payment

15.1 The currency(ies) of the bid and the currency(ies) of payments shall be **as specified in the BDS**.

15.2 Bidders may be required by the Employer to justify, to the Employer's satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the unit rates and prices and shown in the Schedule of Adjustment Data in the Appendix to Bid are reasonable, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

16. Documents Comprising the Technical Proposal

16.1 The Bidder shall furnish a Technical Proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV – Bidding Forms, in sufficient detail to demonstrate the adequacy of the Bidder's proposal to meet the work requirements and the completion time.

**17. Documents
Establishing the
Qualifications of
the Bidder**

- 17.1 In accordance with Section III, Evaluation and Qualification Criteria, to establish that the Bidder continues to meet the criteria used at the time of prequalification, the Bidder shall provide in the corresponding information sheets included in Section IV, Bidding Forms, updated information on any assessed aspect that changed from that time, or if post-qualification applies as specified in ITB 4.8, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.
- 17.2 If a margin of preference applies as specified in accordance with ITB 33.1, domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.
- 17.3 Any change in the structure or formation of a Bidder after being prequalified and invited to Bid (including, in the case of a JV, any change in the structure or formation of any member thereto) shall be subject to the written approval of the Employer prior to the deadline for submission of Bids. Such approval shall be denied if (i) a Bidder proposes to associate with a disqualified Bidder or in case of a disqualified joint venture, any of its members; (ii) as a consequence of the change, the Bidder no longer substantially meets the qualification criteria set forth in Section III, Qualification Criteria and Requirements; or (iii) in the opinion of the Employer, the change may result in a substantial reduction in competition. Any such change should be submitted to the Employer not later than fourteen (14) days after the date of the Invitation for Bids.

**18. Period of Validity
of Bids**

- 18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Employer in accordance with ITB 22.1. A bid valid for a shorter period shall be rejected by the Employer as non responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be extended for twenty-eight (28) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its

bid, except as provided in ITB 18.3.

18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be determined as follows:

- (a) In the case of fixed price contracts, the Contract price shall be the bid price adjusted by the factor **specified in the BDS**.
- (b) In the case of adjustable price contracts, no adjustment shall be made.
- (c) In any case, bid evaluation shall be based on the bid price without taking into consideration the applicable correction from those indicated above.

19. Bid Security

19.1 The Bidder shall furnish as part of its bid, either a Bid-Securing Declaration or a bid security **as specified in the BDS**, in original form and, in the case of a bid security, in the amount and currency **specified in the BDS**.

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

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

- (a) an unconditional guarantee issued by a bank or financial institution (such as an insurance, bonding or surety company);
- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) another security **specified in the BDS**,

from a reputable source from an eligible country. If the unconditional guarantee is issued by a financial institution located outside the Employer's Country, the issuing financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable. In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to bid submission. The bid security shall be valid for twenty-eight (28) days beyond the original validity period of the bid, or

beyond any period of extension if requested under ITB 18.2.

- 19.4 If a bid security or Bid Securing Declaration is specified pursuant to ITB 19.1, any bid not accompanied by a substantially responsive bid security or Bid-Securing Declaration shall be rejected by the Employer as non responsive.
- 19.5 If a bid security is specified pursuant to ITB 19.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the Contract and furnishing the performance security pursuant to ITB 42.
- 19.6 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.7 The bid security may be forfeited or the Bid-Securing Declaration executed:
- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, or any extension thereto provided by the Bidder; or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 41; or
 - (ii) furnish a performance security in accordance with ITB 42.
- 19.8 The bid security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, the bid security or the Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.
- 19.9 If a bid security is **not required in the BDS** pursuant to ITB 19.1, and
- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid, or
 - (b) if the successful Bidder fails to sign the Contract in accordance with ITB 41; or furnish a performance

security in accordance with ITB 42;

the Borrower may, **if provided for in the BDS**, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time **as stated in the BDS**.

20. Format and Signing of Bid

- 20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11 and clearly mark it "ORIGINAL." Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the bid, in the number **specified in the BDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation **as specified in the BDS** and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries or amendments have been made shall be signed or initialed by the person signing the bid.
- 20.3 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 20.4 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

D. Submission and Opening of Bids

21. Sealing and Marking of Bids

- 21.1 The Bidder shall enclose the original and all copies of the bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope.
- 21.2 The inner and outer envelopes shall:
 - (a) bear the name and address of the Bidder;
 - (b) be addressed to the Employer in accordance with ITB

- 22.1;
- (c) bear the specific identification of this bidding process specified in the BDS 1.1; and
 - (d) bear a warning not to open before the time and date for bid opening.
- 21.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the bid.
- 22. Deadline for Submission of Bids**
- 22.1 Bids must be received by the Employer at the address and no later than the date and time **specified in the BDS**. **When so specified in the BDS**, bidders shall have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission procedures **specified in the BDS**.
- 22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- 23. Late Bids**
- 23.1 The Employer shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any bid received by the Employer after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.
- 24. Withdrawal, Substitution, and Modification of Bids**
- 24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 20.2, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
- (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” “MODIFICATION;” and
 - (b) received by the Employer prior to the deadline prescribed for submission of bids, in accordance with

ITB 22.

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

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

25. Bid Opening

25.1 Except in the cases specified in ITB 23 and 24, the Employer shall publicly open and read out in accordance with ITB 25.3 all bids received by the deadline, at the date, time and place **specified in the BDS**, in the presence of Bidders` designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 22.1, shall be **as specified in the BDS**.

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

25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Price, per lot (contract) if applicable, including any discounts and alternative bids; the presence or absence of a bid security, if required; and any other details as the Employer may consider appropriate. Only discounts and alternative bids read out at bid opening shall be considered for evaluation. The Letter of Bid and the Bill of Quantities are to be initialed by representatives of the

Employer attending bid opening in the manner **specified in the BDS**. The Employer shall neither discuss the merits of any bid nor reject any bid (except for late bids, in accordance with ITB 23.1).

- 25.4 The Employer shall prepare a record of the bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot (contract) if applicable, including any discounts and alternative bids; and the presence or absence of a bid security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

26. Confidentiality

- 26.1 Information relating to the evaluation of bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with the bidding process until information on Contract award is communicated to all Bidders in accordance with ITB 40.
- 26.2 Any attempt by a Bidder to influence the Employer in the evaluation of the bids or Contract award decisions may result in the rejection of its bid.
- 26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract award, if a Bidder wishes to contact the Employer on any matter related to the bidding process, it shall do so in writing.

27. Clarification of Bids

- 27.1 To assist in the examination, evaluation, and comparison of the bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its bid, given a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids, in accordance with ITB 31.
- 27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification,

its bid may be rejected.

**28. Deviations,
Reservations, and
Omissions**

28.1 During the evaluation of bids, the following definitions apply:

- (a) “Deviation” is a departure from the requirements specified in the Bidding Documents;
- (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
- (c) “Omission” is the failure to submit part or all of the information or documentation required in the Bidding Documents.

**29. Determination of
Responsiveness**

29.1 The Employer’s determination of a bid’s responsiveness is to be based on the contents of the bid itself, as defined in ITB11.

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

(a) if accepted, would:

- (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
- (ii) limit in any substantial way, inconsistent with the Bidding Documents, the Employer’s rights or the Bidder’s obligations under the proposed Contract; or

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

29.3 The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Proposal, in particular, to confirm that all requirements of Section VI, Works Requirements have been met without any material deviation, reservation or omission.

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

**30. Nonmaterial
Nonconformities**

- 30.1 Provided that a bid is substantially responsive, the Employer may waive any nonconformities in the Bid.
- 30.2 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 30.3 Provided that a bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component. The adjustment shall be made using the method specified in Section III, Evaluation and Qualification Criteria.

**31. Correction of
Arithmetical
Errors**

- 31.1 Provided that the bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
- (a) if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 31.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1, shall result in the rejection of the Bid.

- 32. Conversion to Single Currency** 32.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency **as specified in the BDS.**
- 33. Margin of Preference** 33.1 **Unless otherwise specified in the BDS,** a margin of preference for domestic bidders¹ shall not apply.
- 34. Subcontractors** 34.1 **Unless otherwise stated in the BDS,** the Employer does not intend to execute any specific elements of the Works by sub-contractors selected in advance by the Employer.
- 34.2 In case of Prequalification, the Bidder's Bid shall name the same specialized subcontractor as submitted in the prequalification application and approved by the Employer.
- 34.3 In case of Postqualification, the Employer may permit subcontracting for certain specialized works as indicated in Section III 4.2. When subcontracting is permitted by the Employer, the specialized sub-contractor's experience shall be considered for evaluation. Section III describes the qualification criteria for sub-contractors.
- 34.4 Bidders may propose subcontracting up to the percentage of total value of contracts or the volume of works as **specified in the BDS.**
- 35. Evaluation of Bids** 35.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 35.2 To evaluate a bid, the Employer shall consider the following:
- (a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including Daywork items, where priced competitively;
 - (b) price adjustment for correction of arithmetic errors in accordance with ITB 31.1;

¹ An individual firm is considered a domestic bidder for purposes of the margin of preference if it is registered in the country of the Employer, has more than 50 percent ownership by nationals of the country of the Employer, and if it does not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign contractors. JVs are considered as domestic bidders and eligible for domestic preference only if the individual member firms are registered in the country of the Employer or have more than 50 percent ownership by nationals of the country of the Employer, and the JV shall be registered in the country of the Borrower. The JV shall not subcontract more than 10 percent of the contract price, excluding provisional sums, to foreign firms. JVs between foreign and national firms will not be eligible for domestic preference.

- (c) price adjustment due to discounts offered in accordance with ITB 14.4;
- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 32;
- (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 30.3;
- (f) the additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria;

35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

35.4 If these Bidding Documents allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Bid Form, is specified in Section III, Evaluation and Qualification Criteria.

35.5 If the bid, which results in the lowest Evaluated Bid Price, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, taking into consideration the schedule of estimated Contract payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

36. Comparison of Bids 36.1 The Employer shall compare the evaluated prices of all substantially responsive bids established in accordance with ITB 35.2 to determine the lowest evaluated bid.

37. Qualification of the Bidder 37.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid either continues to meet (if prequalification applies) or meets (if postqualification applies) the qualifying criteria specified in

Section III, Evaluation and Qualification Criteria.

- 37.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.1.
- 37.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Employer shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 38. Employer's Right to Accept Any Bid, and to Reject Any or All Bids**
- 38.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

- 39. Award Criteria**
- 39.1 Subject to ITB 38.1, the Employer shall award the Contract to the Bidder who has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 40. Notification of Award**
- 40.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price"). At the same time, the Employer shall also notify all other Bidders of the results of the bidding and shall publish in *UNDB online* the results identifying the bid and lot (contract) numbers and the following information:
- (i) name of each Bidder who submitted a Bid;
 - (ii) bid prices as read out at Bid Opening;
 - (iii) name and evaluated prices of each Bid that was evaluated;

- (iv) name of bidders whose bids were rejected and the reasons for their rejection; and
- (v) name of the successful Bidder, and the Price it offered, as well as the duration and summary scope of the contract awarded.

40.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

40.3 The Employer shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 40.1, requests in writing the grounds on which its bid was not selected.

41. Signing of Contract

41.1 Promptly upon notification, the Employer shall send the successful Bidder the Contract Agreement.

41.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

42. Performance Security

42.1 Within twenty-eight (28) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the General Conditions of Contract, subject to ITB 35.5, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another form acceptable to the Employer. If the performance security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country.

42.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security. In that event the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

Section II. Bid Data Sheet

| A. Introduction | |
|-----------------------------|---|
| ITB 1.1 | The Employer is: <u>COMPANHIA DO METROPOLITANO DE SÃO PAULO - METRÔ</u> |
| ITB 1.1 | The name of the ICB is: <u>EXECUTION OF CIVIL WORKS, STRUCTURAL WORKS AND FINISHING SERVICES, CONTEMPLATING THE REMAINING WORKS FOR THE CONCLUSION OF LINE 4 YELLOW - PHASE 2 OF SAO PAULO METRO.</u> The identification number of the ICB is: <u>41075213</u> The number and identification of lots (contracts) comprising this ICB is: <u>NOT APPLICABLE</u> |
| ITB 2.1 | The Borrower is: <u>THE STATE OF SÃO PAULO</u> |
| ITB 2.1 | Loan or Financing Agreement amount: International Bank for Reconstruction and Development : US\$ 130.000.000,00 (one hundred and thirty million US dollars) <i>Japan Bank for International Cooperation:</i> US\$ 130.000.000,00 (one hundred and thirty million US dollars) Government of the State of São Paulo: US\$ 340.900.000,00 (three hundred and forty million, and nine hundred thousand US dollars) |
| ITB 2.1 | The name of the Project is: <u>LINE 4 – YELLOW – PHASE 2</u> |
| ITB 4.1 | Maximum number of members in the JV shall be: three (3) |
| ITB 4.4 | A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr . |
| ITB 4.8 | This Bidding Process is not subject to prequalification. |
| B. Bidding Documents | |
| ITB 7.1 | For clarification purposes only, the Employer's address is: Attention: <u>Gerência de Contratações e Compras – GCP - Protocolo</u> Street Address: <u>Rua Boa Vista, 175</u> Floor/Room number: <u>2º andar – Bloco B</u> City: <u>São Paulo</u> ZIP Code: <u>01014-001</u> Country: <u>Brazil</u> Telephone: <u>+55-11-3291-5370</u> Facsimile number: <u>+55-11-3291-5351</u> Electronic mail address: sapereira@metrosp.com.br and |

| | |
|-------------------------------|---|
| | rnaricawa@metrosp.com.br . |
| ITB 7.1 | Web page: www.metro.sp.gov.br |
| ITB 7.4 | <p>The visit to the site of the works will be organized and conducted by the EMPLOYER, and it is HIGHLY RECOMMENDED that the Bidders attend it, considering that it aims to provide the knowledge about the local conditions and the level of eventual difficulties.</p> <p>The site visit can be made during the entire period of publicity of the bidding documents, by scheduling the visit in advance to the following telephone numbers and e-mails: Angela Bambam - 5908-9300 angela.soares@metrosp.com.br; Mario Gallo - 5908-9300 mgallo@ metrosp.com.br</p> <p>A pre-bidding conference will not take place .</p> |
| C. Preparation of Bids | |
| ITB 10.1 | <p>The language of the bid is: <u>ENGLISH</u></p> <p>In addition, the bidding documents are translated into the Portuguese language.</p> <p>Bidders shall have the option to submit their bid in any one of the languages stated above. Bidders shall not submit Bids in more than one language.</p> <p>All correspondence exchange shall be in English or Portuguese language.</p> <p>Language for translation of supporting documents and printed literature is <u>ENGLISH</u>.</p> |
| ITB 11.1 (h) | <p>The Bidder shall submit with its bid the following additional documents:</p> <p>I – Documentation required from Brazilian companies:</p> <p>1a) Statement of compliance before the Ministry of Labor regarding the observance of the provisions set forth by Article 7, item XXXIII of the Brazilian Federal Constitution, which foresees the prohibition of night, dangerous, or hazardous work to minors under 18 years old, as well as of any work to minors under 14 years old, except in the capacity of apprentice, formalized under the terms of item p of the Letter of Bid.</p> <p>1b) Declaration, under the penalties set forth by Law, that no officer (or manager) of the Bidder has been condemned for any of the crimes or violations set forth by Article 1 of State Law n°. 10218, dated 02/12/99, under the terms set forth by its § 1, as well as that it will communicate Companhia do Metropolitano de São Paulo - Metrô, during the term of effectiveness of the Contract, of the occurrence of condemnation of any of its employees, resulting from the practice of such crimes or violations that it may become aware of, formalized under the terms of item q of the Letter of Bid.</p> |

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| | <p>1c) COMPLIANCE WITH THE SOLE PARAGRAPH OF ARTICLE 117 OF THE SÃO PAULO STATE CONSTITUTION: Compliance statement, formalized under the terms of item r of the Letter of Bid.</p> <p>1d) Declaration that there is no supervening events that preclude the award of the contract to the Bidder, and that the Bidder is not and was not considered disreputable by act of a Public Authority, or impeded by any organization from the Public Administration of the State of São Paulo to participate on bids and to sign agreements, formalized under the terms of item s of the Letter of Bid.</p> <p>1e) Declaration, under the penalties set forth by Law, that the Bidder is aware that the existence of register on “CADIN ESTADUAL”, except if suspended, preclude the Bidder from signing agreements with the Employer, according to the State Law n° 12.799/08, without prejudice to other legal sanctions, under the terms of item t of the Letter of Bid.</p> <p>1f) Declaration, under the penalties set forth by Law, that the Bidder meets the requirement related to State Decree no. 53.047/08, formalized under the terms of item u of the Letter of Bid.</p> <p>2 – Acts of incorporation, By-Laws or Articles of Incorporation in force, duly registered, followed by the proof of management on duty;</p> <p>3 – Document of proof of public or private commitment of establishment of Joint Venture/Consortium, as the case may be, signed by the members of the JV/Consortium, containing, on a clear and precise form, the commitment of the members to themselves and to the assignment, as well as the following clauses:</p> <p>(a) name of the Joint Venture/Consortium, which shall be made preferably by ordered combination of words that represent the corporate names of the companies in the consortium, starting with the name of the leader and following, the names of the other members, so that the consortium's name contemplate a number of words equal to the number of consortium members;</p> <p>(b) the Joint Venture/Consortium ´s composition, indicating the percentage of participation of each member;</p> <p>(c) the organization of the JV/Consortium;</p> <p>(d) purpose of the JV/Consortium;</p> <p>(e) indication of the leader company that will represent the JV/Consortium before the Employer.</p> |
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(f) submission of a Power of Attorney by each partner of the JV/Consortium in order to allow the leader partner to represent them on this Bidding.

(g) statement of joint and severally liability issued by the partners of the JV/Consortium related to their deed.

4 – Proof of registry with the National Directory of Legal Entities – “CNPJ”, according to the IN – RFB 1183/2011;

5. Proof of compliance with the FGTS (Certificate of Compliance with the Government Severance Indemnity Fund for Employees – “CRF”), within the respective term of expiry set forth therein;

6 Proof of compliance with the social security and with the National Treasury, by the presentation of the Joint Certificate issued by the Secretariat of Federal Revenue of Brazil (RFB) and by the Federal Treasury Prosecutor’s Office (PGFN), related to all the federal tributes and the Federal Active Debt, administrated by them.

7. Proof of compliance with the Municipal Treasury (ISS), by presentation of the Certificate issued by the competent agency from the City Hall of the Municipality where the main offices of the Bidder are located, within the respective term of expiry set forth therein;

8. Proof of compliance with the State Treasury, by presentation of the certificate concerning ICMS, from the BIDDER’s location or headquarters, within the expiration date stated therein.

9. Proof of compliance of No Debt before the Labor Justice consistent with the Negative or Positive Certificate with effect of negative related to the laborious debt certificate (CNDT), in accordance with article 29, item V of Federal law 8.666/93.

10. For all the required certificates, it will be accepted, likewise, Positive Certificate with effect of negative.

11. Certificate of Non-Request for Bankruptcy, issued by the Judicial Distributor of the Judicial District (Civil Courts) from the city where the company has its main offices, with term of no later than one hundred and eighty (180) days before the date of delivery to the Employer.

If the Bidder is a branch office, it should present the certificate from the main office.

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| | <p>12- Updated certificate for companies issued by Conselho Regional de Engenharia e Agronomia – CREA, in accordance with the Federal law nº 5.194 of December 24th, 1966.</p> <p>II – Documentation required from foreign Companies already established in Brazil:</p> <p>To foreign Companies already established in Brazil, the documentation required consists of the same documents listed in sub items 1 to 12 of item I above, observing the same number order, in addition to the following document:</p> <p>1 Proof of compliance with the Brazilian legislation in relation to the operating license for the country, upon the presentation of Decree of authorization and act of registration or operating license issued by the competent agency, when so required by the respective activity.</p> <p>III – Documentation required to foreign Companies not established in Brazil:</p> <p>1 In case of foreign Company not established in Brazil, the documents listed in sub items 2 to 12 of item I above, statement and certificates may be issued, as much as possible, by agencies equivalent to those mentioned above, from the country where the main offices of the Company are located, or, as the case may be, Statement of Non-Obligation of presenting such documents. The documents must be followed by a Portuguese translation, if documents of foreign bidders are not issued in English.</p> <p>IV –For all Bidders</p> <p>1. Whenever the documents attached to prove the information supplied in the forms is required, such documents shall include, as deemed convenient, official publications, contracts, statements, certifications, or any other similar document, observing, in addition the following provisions:</p> <p>(a) if a single proof is sufficient for more than one form, it shall be presented again, attached to each form, or, it should be indicated in the form to which the proof has been attached, thus avoiding a second presentation;</p> <p>(b) The certificates presented shall contain the respective validity period, being valid on the date of presentation. In case there is no date of expiry mentioned in the respective document, such certificates will be considered valid if they were issued until one hundred and eighty (180) days before the date of presentation.</p> |
| ITB 13.1 | Alternative bids SHALL NOT BE permitted. |

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| ITB 13.2 | Alternative times for completion SHALL NOT BE permitted. |
| ITB 13.4 | Alternative technical solutions shall be permitted for the following parts of the Works: NOT APPLICABLE. |
| ITB 14.5 | The prices quoted by the bidder shall be: adjusted in accordance with the provisions of the Conditions of Contract as in the Section IX – Particular Conditions, sub-clause13.8. |
| ITB 14.7 | The prices shall include all taxes, fees and other charges payable by the Contractor under the Contract or for any other reason, and the base date shall be the 1st day of the month of the opening of the bids. |
| ITB 15.1 | The currency(ies) of the bid and the payment currency(ies) shall be in accordance with the following: <ul style="list-style-type: none"> (a) The unit rates and prices shall be quoted by the Bidder in the Bill of Quantities separately in the following currencies: <ul style="list-style-type: none"> (i) for those inputs to the Works that the Bidder expects to supply from within the Employer’s country, in Reais, the name of the currency of the Employer’s country, and further referred to as “the local currency”; and (ii) for those inputs to the Works that the Bidder expects to supply from outside the Employer’s country (referred to as “the foreign currency requirements”), in up to any three foreign currencies. |
| INCLUSION OF NEW SUBITEM ITB 15.3 | The prices shall be quoted considering two (02) decimal places, not using the other places after the rounding, for which it is recommended to use the “ARRED” function of the electronic spreadsheet programs. |
| ITB 18.1 | The bid validity period shall be (180) one hundred and eighty days. |
| ITB 18.3 (a) | The bid price shall be adjusted by the following factor: NOT APPLICABLE |
| ITB 19.1 | A <i>Bid Security</i> is required. A Bid-Securing Declaration is not required. The amount and currency of the bid security shall be <u>R\$13. 800.000,00</u> |
| ITB 19.8 | The bid security of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, the bid security shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11. |
| ITB 19.9 | NOT APPLICABLE |
| ITB 20.1 | In addition to the original of the bid, the number of copies is: three (3) copies (*pdf. on CD or DVD) of the bid; these copies must be sealed and kept together with the original bid. The scanned copies must be made after the conclusion of the original bid, duly signed and containing the page |

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| | <p>numbers;</p> <p>In addition to the copy of the original bid, the CD or DVD shall contain a copy of the priced Bill of Quantities on editable file format.</p> |
| ITB 20.2 | The written confirmation of authorization to sign on behalf of the Bidder shall consist of: a power of attorney accompanied by proof of due legal existence, by means of a competent document from the bidder's country of origin, equivalent to an organization act, by-laws or articles of association. |
| D. Submission and Opening of Bids | |
| ITB 22.1 | <p>For <u>bid submission purposes</u> only, the Employer's address is: Attention: <u>Gerência de Contratações e Compras - GCP</u> Street Address: <u>Rua Boa Vista, 175</u> Floor/Room number: <u>2º andar –Bloco B</u> City: <u>São Paulo</u> ZIP Code: <u>01014-001</u> Country: <u>Brazil</u> The deadline for bid submission is: Date: <u>January 13th, 2016</u> Time: <u>10 a.m</u> Bidders <i>shall not</i> have the option of submitting their bids electronically.</p> |
| ITB 25.1 | <p>The bid opening shall take place at: Street Address: <u>Rua Boa Vista, 175</u> Floor/Room number: <u>2º andar –Bloco B</u> City : <u>São Paulo</u> Country: <u>Brazil</u> Date: <u>January 13th, 2016</u> Time: <u>10 a.m</u></p> |
| ITB 25.3 | The letter of Bid and the Bill of Quantities will be initialed by the representatives of the Employer attending bid opening. Each letter of Bid and Bill of Quantities will be initialed by at least three representatives of the Employer. |
| E. Evaluation, and Comparison of Bids | |
| ITB 32.1 | <p>The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: Real (R\$). The source of exchange rate shall be: <u>The Central Bank of Brazil (Banco Central do Brasil).</u></p> |

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| | <p>The date for the exchange rate shall be: <u>Twenty eight (28) days before the date stated for Submission of the Bids.</u></p> <p>The currency(ies) of the Bid shall be converted into a single currency in accordance with the procedure under Alternative B that follows: Alternative B: Bidders quote in local and foreign currencies</p> <p>The Employer will convert the amounts in various currencies in which the Bid Price, corrected pursuant to Clause 31, is payable (excluding Provisional Sums but including Daywork where priced competitively) to the single currency identified above at the selling rates established for similar transactions by the authority specified and on the date stipulated above.</p> |
| ITB 33.1 | A margin of preference shall not apply. |
| ITB 34.1 | The Employer <i>does not intend</i> to execute certain specific parts of the Works by sub-contractors selected in advance. |
| ITB 34.4 | <p><i>a) In the case of Postqualification:</i></p> <p>Contractor's proposed subcontracting: Maximum percentage of subcontracting permitted is: <i>30% of the total contract amount.</i></p> <p>b) Bidders planning to subcontract more than 10% of total volume of work shall specify, in the Letter of Bid, the activity (ies) or parts of the works to be subcontracted along with complete details of the sub-contractors and their qualification and experience.</p> <p>c) Sub-contractors' qualification and experience will not be considered for evaluation of the Bidder. The Bidder on its own (without taking into account the qualification and experience of the sub-contractor) should meet the qualification criteria.</p> <p>It may be subcontracted auxiliary services from the groups of items of the Bill of Quantities, limited to 30% of the Contract value, such as:</p> <ul style="list-style-type: none"> - Foundations and Lowering; - Treatment and Monitoring of Contaminated Areas; - Waterproofing; - Metal Structures, Roofing/Cover, and Closing; - Visual Communication; |

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| | - Hydraulics. |
| F. Award of Contract | |
| ITB 40.1 | <p>The bidder shall submit, in the case of a joint venture or a consortium, the respective draft of agreement, in which, besides the provisions stated in the agreement, the following provisions:</p> <p>(1) We will submit, no later than sixty (60) days from the notification letter, the joint venture or consortium agreement registered at the São Paulo trade board (“Junta Comercial do estado de São Paulo”).</p> <p>(2) We will submit, no later than sixty (60) days from the notification letter, the taxpayer number (CNPJ).</p> <p>(3) We will submit, no later than sixty (60) days from the notification letter, the registered authorization decree, pursuant to article 28 – v of federal law no. 8666/93 and its amendments, and articles 1134 and 1141 of law no. 10406/2002. It will be accepted an interim permission for running the company in Brazil, until the bidder gets the registered authorization decree. <i>(only for foreign companies and joint venture or consortium not operating in Brazil).</i></p> <p>Note 1: If the successful bidder is a joint venture, the bidder may opt to form a specific purpose entity – SPE instead of submitting the joint venture agreement. In such case, the SPE partners must be the same partners with the same proportions of participation that was stated in the joint venture agreement. The bidder shall observe that in the case of a specific purpose entity – SPE, the draft of the agreement shall be submitted to the employer for approval prior to the incorporation of the SPE under Brazilian law.</p> <p>Note 2: In the case of an individual bidder the provision stated on item 3 above shall be submitted by a statement.</p> <p>Note 3: If the Contractor presented the certificate issued by the CREA of another state, it must present, by the contract signature, the validation of the CREA from São Paulo, valid for at least one hundred and eighty (180) days.</p> <p>Note 4: If the successful bidder is a foreign company that does not operate in Brazil, it shall submit the documents, if applicable, required on ITB 11.1 h (subitems 2 to 12 of item I) properly consularized and translated by a sworn translator to the Portuguese language, according to article 32, § 4 of Federal Law 8,666/93.</p> |

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| ITB 40.4 | <p>After the public opening of bids, information relating to the examination, clarification, and evaluation of bids and recommendations concerning awards shall not be disclosed to bidders or other persons not officially concerned with this process until the publication of the award of contract.</p> <p>The Bidder may appeal against the final evaluation of the bidding committee, only after contract award.</p> |
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Section III. *Evaluation and Qualification Criteria (Without Prequalification)*

This Section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 35 and ITB 37, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV, Bidding Forms.

Wherever a Bidder is required to state a monetary amount, Bidders should indicate the USD equivalent using the rate of exchange determined as follows:

- For construction turnover or financial data required for each year - Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- Value of single contract - Exchange rate prevailing on the date of the contract.
- **Balance sheets and other financial statements – exchange rate prevailing on the date of closing of the fiscal year.**

Exchange rates shall be taken from the publicly available source identified in the ITB 32.1. Any error in determining the exchange rates in the Bid may be corrected by the Employer.

1. Domestic Preference

NOT APPLICABLE

2. Evaluation

In addition to the criteria listed in ITB 35.2 (a) – (e) the following criteria shall apply:

2.1 Assessment of adequacy of Technical Proposal with Requirements

The bidder shall present work program regarding the constructive methods of the main services (shafts, tunnels and stations). The bidder shall present a sample of the work schedule compatible with the time periods and milestones to be met. The program shall also regard the technical and logistical support, the estimated permanence of manpower resources and equipment, and the organization chart of the Works. The proposals shall include the samples of plans for meeting the Management of: Quality Assurance, Risks, Environment, Safety and Occupational Health, Emergencies and Non-Conformities Assistance.

2.2 Multiple Contracts, if permitted under ITB 35.4, will be evaluated as follows:

NOT APPLICABLE

2.3 Alternative Completion Times, if permitted under ITB 13.2, will be evaluated as follows: NOT APPLICABLE

2.4 Technical alternatives, if permitted under ITB 13.4, will be evaluated as follows: NOT APPLICABLE

2.5 Specialized Subcontractors

Only the specific experience of sub-contractors for specialized works permitted by the Employer will be considered. The general experience and financial resources of the specialized sub-contractors shall not be added to those of the Bidder for purposes of qualification of the Bidder.

The specialized sub-contractors proposed shall be fully qualified for their work proposed, and meet the following criteria: **NOT APPLICABLE**

3. Qualification

| Eligibility and Qualification Criteria | | Compliance Requirements | | | | Documentation | |
|--|--|---|-----------------------|--------------------------------------|-----------------------|---------------|---|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| 1. Eligibility | | | | | | | |
| 1.1 | Nationality | Nationality in accordance with ITB 4.3 | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Forms ELI – 1.1 and 1.2, with attachments |
| 1.2 | Conflict of Interest | No conflicts of interest in accordance with ITB 4.2 | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Letter of Bid |
| 1.3 | Bank Eligibility | Not having been declared ineligible by the Bank, as described in ITB 4.4, 4.5, 4.6 and 4.7 | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Letter of Bid |
| 1.4 | Government Owned Entity of the Borrower country | Meets conditions of ITB 4.5 | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Forms ELI – 1.1 and 1.2, with attachments |
| 1.5 | United Nations resolution or Borrower’s country law | Not having been excluded as a result of prohibition in the Borrower’s country laws or official regulations against commercial relations with the Bidder’s country, or by an act of compliance with UN Security Council resolution, both in accordance with ITB 4.7 and Section V. | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Forms ELI – 1.1 and 1.2, with attachments |

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|---|---|---|-------------------------------------|--------------------------------------|------------------------------------|---------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| 2. Historical Contract Non-Performance | | | | | | | |
| 2.1 | History of Non-Performing Contracts | Non-performance of a contract ² did not occur as a result of contractor default since January 1 st 2013. | Must meet requirement ¹² | Must meet requirements | Must meet requirement ³ | N/A | Form CON-2 |
| 2.2 | Suspension Based on Execution of Bid Securing Declaration by the Employer or withdrawal of the Bid within Bid validity | Not under suspension based on execution of a Bid Securing Declaration pursuant to ITB 4.6 or withdrawal of the Bid pursuant ITB 19.9. | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Bid Submission Form |
| 2.3 | Pending Litigation | Bidder's financial position and prospective long term profitability sound according to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Bidder | Must meet requirement | N/A | Must meet requirement | N/A | Form CON – 2 |

² Non performance, as decided by the Employer, shall include all contracts where (a) non performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non performance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Non performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

³ This requirement also applies to contracts executed by the Bidder as JV member.

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|--|---------------------------|--|-------------------------|--------------------------------------|-----------------------|---------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| 2.4 | Litigation History | No consistent history of court/arbitral award decisions against the Bidder ⁴ since January 1 st 2013 | Must meet requirement | Must meet requirement | Must meet requirement | N/A | Form CON – 2 |

⁴ The Bidder shall provide accurate information on the letter of Bid about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of court/arbitral awards against the Bidder or any member of a joint venture may result in disqualifying the Bidder.

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|---|-------------------------------|---|-------------------------|--------------------------------------|--|--|----------------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| 3. Financial Situation and Performance | | | | | | | |
| 3.1 | Financial Capabilities | (i) The audited balance sheets or, if not required by the laws of the Bidder's country, other financial statements acceptable to the Employer, for the last five (5) years shall be submitted and must demonstrate the current soundness of the Bidder's financial position | Must meet requirement | N/A | Must meet requirement | N/A | Form FIN – 3.3, with attachments |
| | | (ii) The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as R\$ 208.500.000,00 (two hundred and eight million, and five | Must meet requirement | Must meet requirement | At least 40% of the required cash flow | At least 40% of the required cash flow | Form FIN – 3.3 |

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|--|---|---|-------------------------|--------------------------------------|---------------------------------|---------------------------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| | | hundred thousand reais) for the subject contract(s) net of the Bidders other commitments. | | | | | |
| 3.2 | Average Annual Construction Turnover | Minimum average annual construction turnover of R\$ 760.000.000,00(seven hundred and sixty million reais) calculated as total certified payments received for contracts in progress and/or completed within the last 5 years, divided by <i>five</i> years. | Must meet requirement | Must meet requirement | At least 30% of the requirement | At least 70% of the requirement | Form FIN – 3.2 |

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|--|---|--|-------------------------|--------------------------------------|-----------------------|---------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| 4. Experience | | | | | | | |
| 4.1 (a) | General Construction Experience | Experience under construction contracts in the role of prime contractor, JV member, sub-contractor, or management contractor for at least the last five (5) years prior to the application submission deadline, and with activity in at least nine (9) months in each year. | Must meet requirement | N/A | Must meet requirement | N/A | Form EXP – 4.1 |
| 4.2 (a) | Specific Construction & Contract Management Experience | i) Participation as contractor, management contractor or subcontractor, in at least one (1) contracts within the last ten (10) years, each with a value of at least R\$ 650.000.000,00 (six hundred and fifty | Must meet requirement | Must meet requirement ⁵ | N/A | N/A | Form EXP 4.2(a) |

⁵ In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|--|---------|---|-------------------------|--------------------------------------|-------------|---------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| | | million reais), that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics as described in Section VII, Scope of Works | | | | | |
| 4.2 (b) | | For the above and any other contracts completed and under implementation as prime contractor, joint venture member, management contractor or sub-contractor ⁶ on or after the first day of the calendar year during the period stipulated in 4.2 (a) above, a minimum construction experience in the | Must meet requirements | Must meet requirements | N/A | N/A | Form EXP – 4.2 (b) |

⁶ For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder’s share shall be counted to meet this requirement.

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|--|---------|---|-------------------------|--------------------------------------|-------------|---------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| | | following key activities successfully completed ⁷ : a –construction of an underground subway station using VCA or NATM – New Austrian Tunnelling Method, or using both methods, with technical complexity and similarity with the constructive characteristics of the object of this contract, with a length of 138.00 m, volume of 93,000 m ³ of excavation and concrete volume of 20,000 m ³ ; executed in no more than 5 years. b – NATM tunnel constructed on soil and rock, executed in urban area, with minimum section of | | | | | |

⁷ Volume, number or rate of production of any key activity can be demonstrated in one or more contracts if executed during same time period, but not in a combined form, for example, to prove the execution of a tunnel (550 m), it can not be presented a combination of two contracts from different companies. The minimum experience defined on items a, b, c shall be proved in their entirety by the members of the JV, in the same manner indicated on the tunnel example.

| Eligibility and Qualification Criteria | | | Compliance Requirements | | | Documentation | |
|--|---------|--|-------------------------|--------------------------------------|-------------|---------------|-------------------------|
| No. | Subject | Requirement | Single Entity | Joint Venture (existing or intended) | | | Submission Requirements |
| | | | | All Parties Combined | Each Member | One Member | |
| | | 70m ² and 550m of extension (minimum). Urban area means a place with buildings and that has an urban road system and public utilities network. c – Construction of subway or train civil works with the system operating commercially. | | | | | |

3.5 Personnel

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

| POSITION | GRADUATION | WORKS EXPERIENCE |
|--|-------------------|---|
| CONTRACT MANAGER /ENTERPRISE MANAGEMENT AND RISK | Civil Engineering | At least 10 years experience in Civil Engineering, and during that period, at least 5 years experience in technical and administrative coordination of civil works of this complexity and subway/railway systems. Fluent in portuguese. |
| PRODUCTION MANAGER | Civil Engineering | At least 8 years experience in Civil Engineering, and during that period, at least 5 years experience in technical and administrative coordination of civil works of this complexity with different front works and subway/railway systems. Fluent in portuguese. |
| PLANNING COORDINATOR | Engineering | At least 8 years experience in Civil Engineering, and during that period, at least 3 years experience in technical and administrative coordination of subway/railway civil works. Fluent in portuguese. |
| ENVIRONMENT AND QUALITY COORDINATOR | Engineering | At least 8 years experience in Civil Engineering, and during that period, at least 3 years experience in technical and administrative coordination of subway/railway civil works. Fluent in portuguese. |
| SECURITY COORDINATOR | Engineering | At least 8 years experience in Civil Engineering, and during that period, at least 3 years experience in technical and administrative coordination of subway/railway civil works. Fluent in portuguese. |

| POSITION | GRADUATION | WORKS EXPERIENCE |
|---------------------|-------------------|---|
| PRODUCTION ENGINEER | Civil Engineering | At least 4 years experience in Civil Engineering, and during that period, at least two years experience in the performance/management of subway/railway Civil Works. Fluent in portuguese |

The Bidder shall provide details of the proposed personnel and their experience records using Forms PER-1 and PER-2 included in Section IV, Bidding Forms.

3.6 Equipment

The Bidder must demonstrate that it has the key equipment listed hereafter:

- Road Roller with weight capacity on the drum and cabin: 3.5 tons
- Crane - 30 tons
- Rolling gantry – 12m x 20 tons
- Backhoe - Power 140 HP - stroke 130mm
- Loader - Power 180 HP - bucket 3 m³
- Crane with pole capacity of 5 tons.
- Designed concrete robot, consisting of piston pump, respective piping and hose.
- Horizontal and vertical jet-grouting consisting of drill, compressor, injection pump, high pressure mixer and cement silo.

The Bidder shall provide further details of proposed items of equipment using Form EQU in Section IV, Bidding Forms.

Section IV. Bidding Forms

Section IV. Bidding Forms

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| Form CON – 2 | 98 |
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| Form of Bid Security | 110 |

Letter of Bid

Date: _____

ICB No.: _____

Invitation for Bid No.: _____

Alternative No.: _____

To:

COMPANHIA DO METROPOLITANO DE SÃO PAULO - METRÔ

Attention: Gerência de Contratações e Compras - GCP

Rua Boa Vista, 175

01014-001 São Paulo - SP

Brasil

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 8) _____;
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We have not been suspended nor declared ineligible by the Employer based on execution of a Bid Securing Declaration in the Employer's country in accordance with ITB 4.6.
- (d) We offer to execute in conformity with the Bidding Documents the following Works: _____;
- (e) The total price of our Bid, excluding any discounts offered in item (f) below is:
In case of only one lot, total price of the Bid _____
- (f) The discounts offered and the methodology for their application are:
- i) The discounts offered are: _____
- ii) The exact method of calculations to determine the net price after application of discounts is shown below:

_____;
- (g) Our bid shall be valid for a period of _____ days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

- (h) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;
- (i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.2(e), other than alternative bids submitted in accordance with ITB 13;
- (j) We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by a member of the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer's country laws or official regulations or pursuant to a decision of the United Nations Security Council;
- (k) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB 4.5;⁸
- (l) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:

| Name of Recipient | Address | Reason | Amount |
|-------------------|---------|--------|--------|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

(If none has been paid or is to be paid, indicate "none.")

- (m) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption.

⁸ Bidder to use as appropriate.

The provisions (p) to (u) are applicable for Brazilian companies and foreign companies already established in Brazil, as stated on ITB 11.1 (h).

- (p) We are in compliance with the Ministry of Labor regarding the observance of the provisions of item XXXIII of Article 7 of the Constitution of the Federative Republic of Brazil, under the terms of item V of Article 27 of Law no. 8.666/93, dated June 21, 1993, combined with Law no. 9.854, dated October 27, 1999.
- (q) None of our officers (or managers) has been condemned for any of the crimes or violations set forth by Article 1 of State Law no. 10218, dated 02/12/99, under the terms set forth by its § 1, as well as that we will communicate the Employer, during the term of effectiveness of the Contract, of the occurrence of condemnation of any of our employees resulting from the practice of such crimes or violations that may come to our knowledge.
- (r) We comply with the Work Safety and Health Standards, pursuant to the sole paragraph of Article 117 of the Constitution of the State of São Paulo.
- (s) There are no supervening events that preclude our qualification, and we were not considered disreputable by Federal, Municipal or State organization, or impeded by any organization from the Public Administration of the State of São Paulo to participate on bids and to sign agreements.
- (t) We are aware that the existence of register on “CADIN ESTADUAL”, except if suspended, preclude us from signing agreements with the Employer, according to the State Law n° 12.799/08, without prejudice to other legal sanctions.
- (u) We will use, to perform the bid services, wood products and byproducts of exotic origin, or products and byproducts listed in article 1 of the state decree 53,047/08 acquired from a company duly registered in the CADMADEIRA.

Name of the Bidder* _____

Name of the person duly authorized to sign the Bid on behalf of the Bidder** _____

Title of the person signing the Bid _____

Signature of the person named above _____

Date signed _____ day of _____,

*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

** : Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid

Appendix to Bid

Schedule of Adjustment Data

[In Tables A, B, and C, below, the Bidder shall (a) indicate its amount of local currency payment, (b) indicate its proposed source and base values of indices for the different foreign currency elements of cost, (c) derive its proposed weightings for local and foreign currency payment, and (d) list the exchange rates used in the currency conversion. In the case of very large and/or complex works contracts, it may be necessary to specify several families of price adjustment formulae corresponding to the different works involved.]

Table A. Local Currency

| Index code | Index description | Source of index | Base value and date | Bidder's proposed weighting |
|----------------------------|---|---|--|-----------------------------|
| STATE DECREE NO. 27.133 | PRICE INDEX FOR GENERAL SERVICES WITH PREDOMINANCE OF MANPOWER | OFFICIAL GAZETTE OF THE STATE OF SÃO PAULO, STATE DECREE NO. 27.133 OF 06/26/1987 | APPLICABLE FROM THE MONTH BEFORE THE BASE DATE OF THE PRICES UNTIL THE MONTH BEFORE THAT OF THE APPLICATION OF THE ADJUSTMENT. | 0,16 |
| PRICE INDEX NUMBER 1004819 | WHOLESALE PRICE INDEX – PROCESSING STAGE – INTERMEDIATE GOODS – MATERIALS AND COMPONENTS FOR CONSTRUCTION | FUNDAÇÃO GETÚLIO VARGAS | | 0,26 |
| PRICE INDEX NUMBER 1004808 | WHOLESALE PRICE INDEX – PROCESSING STAGE – INTERNAL AVAILABILITY – FINAL GOODS – INVESTMENT ASSETS | FUNDAÇÃO GETÚLIO VARGAS | | 0,15 |
| ICC | CONSTRUCTION INDEX COST - MUNICIPALITIES OF THE CAPITALS - SÃO PAULO – TOTAL (COLUMN 54CC) | FUNDAÇÃO GETÚLIO VARGAS | | 0,43 |
| | | | | Total |

Table B. Foreign Currency (FC)

State type: [If the Bidder is allowed to receive payment in foreign currencies this table shall be used. If Bidder wishes to quote in more than one foreign currency (up to three currencies permitted) then this table should be repeated for each foreign currency.]

| Index code | Index description | Source of index | Base value and date | Bidder's related source currency in type/amount | Equivalent in FC1 | Bidder's proposed weighting |
|--------------|-------------------|-----------------|---------------------|---|-------------------|--|
| | Nonadjustable | — | — | — | | A: _____ * B: _____ * — C: _____ * — D: _____ * — E: _____ * — |
| Total | | | | | | 1.00 |

Table C. Summary of Payment Currencies

Summary of currencies of the bid for _____ [*insert name of Section of the Works*]

| <i>Name of currency</i> | <i>Amounts payable</i> |
|----------------------------|------------------------|
| Local currency: _____ | |
| Foreign currency #1: _____ | |
| Foreign currency #2: _____ | |
| Foreign currency #3: _____ | |

Bill of Quantities

| | |
|---|---|
| Object: | |
| EXECUTION OF CIVIL WORKS, STRUCTURAL WORKS AND FINISHING SERVICES, CONTEMPLATING THE REMAINING WORKS FOR THE CONCLUSION OF LINE 4 YELLOW - PHASE 2 OF SAO PAULO METRO. | |
| DESCRIPTION | TOTAL PRICE Base Date: |
| SUMMARY: | |
| <p>BLOCK 1 - HIGIENÓPOLIS MACKENZIE STATION, OSCAR FREIRE STATION, MORUMBI STATION, CUNHA GAGO MAINTENANCE BASE, VILA SONIA BUS TERMINAL AND VILA SONIA YARD</p> <p>BLOCK 2 - VCA, VSE -VENTILATION AND EMERGENCY EXIT- VILA SONIA, VILA SONIA STATION, TUNNELS, VSE-VENTILATION AND EMERGENCY EXIT- EDMUNDO LINS AND SE - EMERGENCY EXIT- DAVID MATARASSO</p> <p>BLOCK 3 - GENERAL SERVICES, BUILDINGS FOR CONSTRUCTION SITE, OPERATION, MAINTENANCE, CLEANING AND SECURITY OF THE CONSTRUCTION SITE, BASIC NETWORKS, ENVIRONMENTAL MANAGEMENT, RISK MANAGEMENT, TREE MANAGEMENT, TREATMENT OF CONTAMINATED AREAS AND ARCHEOLOGY</p> | |
| TOTAL | |

BLOCK 1 - HIGIENÓPOLIS MACKENZIE STATION, OSCAR FREIRE STATION, MORUMBI STATION, CUNHA GAGO MAINTENANCE BASE, VILA SONIA BUS TERMINAL AND VILA SONIA YARD

| DESCRIPTION | | ITEMS | | | TOTAL PRICE |
|--|--|-------|----|-----|-------------|
| | | | | | Base Date: |
| | SUMMARY | | | | |
| | | | | | |
| | Preliminary services | 1 | to | 12 | |
| | | | | | |
| | Earthmoving | 13 | to | 29 | |
| | | | | | |
| | Foundations and Lowering | 30 | to | 88 | |
| | | | | | |
| | Concrete | 89 | to | 122 | |
| | | | | | |
| | Waterproofing | 123 | to | 130 | |
| | | | | | |
| | Urbanization | 131 | to | 142 | |
| | | | | | |
| | Piping and tubes | 143 | to | 145 | |
| | | | | | |
| | Additional Services | 146 | to | 147 | |
| | | | | | |
| | Metal Structures, Roofing/Cover, and Closing | 148 | to | 155 | |
| | | | | | |
| | Other | 156 | to | 157 | |
| | | | | | |
| | Signage and Traffic Detours | 158 | to | 168 | |
| | | | | | |
| | Finishing | 169 | to | 176 | |
| | | | | | |
| | Visual Communication | 177 | to | 184 | |
| | | | | | |
| | Hydraulics | 185 | to | 193 | |
| | | | | | |
| | Landscaping and Reurbanization | 194 | to | 198 | |
| | | | | | |
| NOTE: Identification Block 1 | | | | | |
| <i>HIGIENÓPOLIS MACKENZIE STATION, OSCAR FREIRE STATION, MORUMBI STATION, CUNHA GAGO MAINTENANCE BASE, VILA SONIA BUS TERMINAL AND VILA SONIA YARD</i> | | | | | |
| TOTAL PRICE | | | | | - |

| ITEM | DESCRIPTION | PRICE N° | QUANTITY | UN | PRICE (Base Date) | |
|------|--|----------|--------------|---------------------|-------------------|-------|
| | | | | | UNITARY | TOTAL |
| | <u>PRELIMINARY SERVICES</u> | | | | | |
| 1 | Demolition of basic concrete | 1.002.00 | 305,97 | m ³ | | |
| 2 | Demolition of reinforced concrete | 1.004.00 | 1.345,27 | m ³ | | |
| 3 | Demolition and removal of grout | 1.005.00 | 158,97 | m ³ | | |
| 4 | Demolition of concrete block | 1.006.00 | 56,31 | m ³ | | |
| 5 | Demolition of concrete walkway | 1.011.00 | 215,50 | m ³ | | |
| 6 | Demolition of asphalt pavement | 1.014.00 | 203,84 | m ³ | | |
| 7 | Demolition of gutter | 1.020.00 | 84,76 | m ² | | |
| 8 | Removal of rail | 1.022.00 | 525,00 | m | | |
| 9 | Demolition of concrete cladding | 1.032.00 | 200,00 | m ³ | | |
| 10 | Fixed siding, h=2.20m with wood | 1.068.00 | 607,00 | m | | |
| 11 | Siding paint and temporary installations | 1.082.00 | 415,17 | m ² | | |
| 12 | Gravel or cobblestone recovering area | 1.086.00 | 577,23 | m ³ | | |
| | | | | | | |
| | <u>EARTHMOVING</u> | | | | | |
| 13 | Combing and cleaning of terrain | 2.002.00 | 6.112,00 | m ² | | |
| 14 | Compacted landfill | 2.006.00 | 9.530,29 | m ³ | | |
| 15 | Mechanical excavation | 2.008.00 | 80.399,72 | m ³ | | |
| 16 | Spreading earth | 2.010.00 | 91.211,80 | m ³ | | |
| 17 | Spreading excavated material – rock | 2.011.00 | 1.601,60 | m ³ | | |
| 18 | Mechanical excavation for foundations and ditches | 2.020.00 | 4.834,59 | m ³ | | |
| 19 | Trench excavation and underground stations | 2.022.00 | 2.140,09 | m ³ | | |
| 20 | Manual excavation for foundations and ditches | 2.024.00 | 369,21 | m ³ | | |
| 21 | Tunnel and station excavation using the NATM method | 2.026.00 | 1.542,40 | m ³ | | |
| 22 | Tunnel and station excavation using the NATM method in soft rock with explosives | 2.028.00 | 1.091,20 | m ³ | | |
| 23 | Tunnel and station excavation using the NATM method in hard rock with explosives | 2.030.00 | 510,40 | m ³ | | |
| 24 | Recovering of foundations and ditches | 2.044.00 | 5.194,81 | m ³ | | |
| 25 | Surface recovering of tunnel and stations | 2.046.00 | 5.175,20 | m ³ | | |
| 26 | Soil supply | 2.048.00 | 19.900,28 | m ³ | | |
| 27 | Loading of soil at storage facility or warehouse | 2.050.00 | 19.900,30 | m ³ | | |
| 28 | Transport of earth (dmt = 50 km) [P=(0.0213+0.0382/d) x phc] | 2.060.00 | 5.459.314,75 | m ³ x km | | |
| 29 | Transport of excavated material – rock (dmt = 50 km) [P=(0.0239+0.0429/d) x phc] | 2.062.00 | 80.080,00 | m ³ x km | | |

| | FOUNDATIONS AND DRAWDOWN | | | | | |
|----|--|----------|----------|------------------------|--|--|
| 30 | Supply of metal profile delivered at work site | 3.001.00 | 113,73 | t | | |
| 31 | Loading of metal profile | 3.002.00 | 59,81 | t | | |
| 32 | Unloading of metal profile | 3.004.00 | 59,81 | t | | |
| 33 | Transport of metal profile | 3.006.00 | 1.794,21 | t x km | | |
| 34 | Metal profile cut | 3.008.00 | 57,30 | t | | |
| 35 | Metal profile closing | 3.010.00 | 57,30 | t | | |
| 36 | Drilling with bentonite and placement of profiles up to 2I-18" or H-400, included | 3.020.00 | 24,29 | t | | |
| 37 | Assembly of connection point | 3.028.00 | 2,50 | t | | |
| 38 | Disassembly of connection point | 3.032.00 | 2,50 | t | | |
| 39 | Installation of wood planks | 3.042.00 | 11,04 | m ³ | | |
| 40 | Removal of wood planks | 3.044.00 | 9,83 | m ³ | | |
| 41 | External transport of wood planks | 3.046.00 | 1,22 | m ³ x km | | |
| 42 | Tie rods 60 t, anchored section cost | 3.072.00 | 158,00 | m | | |
| 43 | Tie rods 80 t, linear cost | 3.076.00 | 425,00 | m | | |
| 44 | Diaphragm wall excavation with supply and application of bentonite | 3.090.00 | 1.925,80 | m ³ | | |
| 45 | Diaphragm wall execution | 3.092.00 | 1.925,80 | m ³ | | |
| 46 | Continuous helical piles Ø 30 cm | 3.180.00 | 86,90 | m | | |
| 47 | Continuous helical piles Ø 50 cm | 3.182.00 | 594,45 | m | | |
| 48 | Continuous helical piles Ø 60 cm | 3.184.00 | 2.864,58 | m | | |
| 49 | Continuous helical piles Ø 80 cm | 3.186.00 | 333,40 | m | | |
| 50 | Root-type pile Ø 16 cm - ground | 3.198.00 | 216,00 | m | | |
| 51 | Root-type pile Ø 20 for 31 tf load - ground | 3.202.00 | 618,00 | m | | |
| 52 | Root-type pile Ø 25 cm for 60 tf load - ground | 3.204.00 | 48,00 | m | | |
| 53 | Root-type pile Ø 31 cm for 80 tf < load ≤ 100 tf - ground | 3.214.00 | 934,70 | m | | |
| 54 | Root-type pile - Ø 41 cm - rock | 3.216.00 | 222,42 | m | | |
| 55 | Root-type pile - Ø 41 cm - ground | 3.218.00 | 1.474,71 | m | | |
| 56 | Rotational drilling with direct circulation for drill holes up to Ø 30 cm, with full cladding | 3.304.00 | 490,00 | m | | |
| 57 | Rotational drilling with reverse circulation for Ø 40 cm drill holes | 3.306.00 | 1.095,35 | m | | |
| 58 | Driving of cladding pipe in rotational drilling with reverse circulation for Ø 40 cm drill holes | 3.312.00 | 1.132,85 | m | | |
| 59 | Implementation of drilled gravitational shaft Ø 30 cm | 3.350.00 | 442,00 | m | | |
| 60 | Implementation of drilled gravitational shaft Ø 40 cm | 3.352.00 | 906,35 | m | | |
| 61 | Implementation of parallel tube | 3.358.00 | 637,00 | m | | |

| | | | | | | |
|----|---|----------|------------|----------------|--|--|
| | injectors | | | | | |
| 62 | Implementation of filter tips up to Ø 1 1/2" for pre-drill | 3.368.00 | 18,00 | un | | |
| 63 | Implementation of filter tip Ø 2" | 3.368.01 | 25,00 | un | | |
| 64 | Implementation of submerged pump, automatic control, and alarm system | 3.372.00 | 51,00 | un | | |
| 65 | Implementation of vacuum pumps for gravitational shafts | 3.374.01 | 7,00 | set | | |
| 66 | Implementation of pump set for injector | 3.376.01 | 13,00 | set | | |
| 67 | Implementation of pump set for filter tips | 3.380.01 | 3,00 | set | | |
| 68 | Implementation of water collection pipe Ø 4" | 3.382.00 | 1.010,90 | m | | |
| 69 | Implementation of water collection pipe Ø 6" | 3.384.00 | 300,00 | m | | |
| 70 | Implementation of collection pipes for filter tips Ø 6" | 3.396.00 | 130,00 | m | | |
| 71 | Implementation of water meter 10 m ³ /h | 3.398.00 | 62,00 | un | | |
| 72 | Implementation of water level indicators or peizometers | 3.402.00 | 528,85 | m | | |
| 73 | Implementation of emergency generator | 3.404.00 | 4,00 | un | | |
| 74 | Availability of submerged pump with Q ≤ 7,5 m ³ /h capacity | 3.450.00 | 6.605,00 | un x day | | |
| 75 | Operation of submerged pump with Q ≤ 7,5 m ³ /h capacity | 3.454.00 | 19.262,00 | un x day | | |
| 76 | Availability of emergency generator | 3.458.00 | 209.994,00 | kVA x day | | |
| 77 | Operation of emergency generator | 3.460.00 | 16.900,00 | kVA x h | | |
| 78 | Operation of pump set for injectors | 3.462.01 | 2.340,00 | set x day | | |
| 79 | Operation of vacuum pump set for gravitational shafts | 3.464.01 | 820,00 | set x day | | |
| 80 | Operation of pump set for tips | 3.468.01 | 1.170,00 | set x day | | |
| 81 | Protective box with pre-manufactured concrete rings for shafts and ejectors in high-traffic areas | 3.480.00 | 67,00 | un | | |
| 82 | Gravel drainage with geotextile lining | 3.490.00 | 250,43 | m | | |
| 83 | Gravel mattress | 3.493.00 | 110,00 | m ³ | | |
| 84 | Short drainage Ø 10 cm - L = 1.50 m (barbican) | 3.496.02 | 800,00 | un | | |
| 85 | PVC Pipe Ø 2" for drainage | 3.502.00 | 199,50 | m | | |
| 86 | Geotextile Lining | 3.804.00 | 6.250,13 | m ² | | |
| 87 | Deep horizontal drainage | 3.808.00 | 426,41 | m | | |
| 88 | Installation and operation of vacuum pumps for DHD | 3.812.01 | 90,00 | set x day | | |
| | | | | | | |

| | <u>CONCRETE</u> | | | | | |
|-----|--|----------|------------|----------------|--|--|
| 89 | Concrete $8.0 \leq f_{ck} < 12.0$ MPa | 4.008.00 | 1.213,24 | m ³ | | |
| 90 | Concrete $12.0 \leq f_{ck} < 15.0$ MPa | 4.010.00 | 320,00 | m ³ | | |
| 91 | Concrete $15.0 \leq f_{ck} < 18.0$ MPa | 4.012.00 | 204,67 | m ³ | | |
| 92 | Concrete $24.0 \leq f_{ck} < 27.0$ MPa for diaphragm wall, station/pillars | 4.019.00 | 1.450,09 | m ³ | | |
| 93 | Concrete $30.0 \leq f_{ck} < 34.0$ MPa | 4.024.00 | 839,96 | m ³ | | |
| 94 | Concrete $34.0 \leq f_{ck} < 37,0$ MPa | 4.026.00 | 23.581,40 | m ³ | | |
| 95 | Supply and application of shotcrete $24.0 \leq f_{ck} < 27.0$ MPa | 4.038.00 | 2.022,63 | m ³ | | |
| 96 | Concrete release | 4.050.00 | 27.005,05 | m ³ | | |
| 97 | Cast for tunnel and underground station | 4.100.00 | 16.671,14 | m ² | | |
| 98 | Cast for foundation | 4.102.00 | 7.844,62 | m ² | | |
| 99 | Cast for stations and building | 4.104.00 | 51.243,49 | m ² | | |
| 100 | Cast for precast concrete elements | 4.110.00 | 3.705,80 | m ² | | |
| 101 | Metallic slipform for "mining" system | 4.112.00 | 109,20 | m ² | | |
| 102 | Self-sustaining metallic form – For work during restricted hours | 4.113.30 | 873,00 | m ² | | |
| 103 | Shuttering tiles | 4.130.00 | 100.044,27 | m ³ | | |
| 104 | Shuttering tiles – For work during restricted hours | 4.130.30 | 7.612,50 | m ³ | | |
| 105 | Steel CA - 50 – supply | 4.136.00 | 122,63 | t | | |
| 106 | Steel CA - 50 – supply and installation | 4.142.00 | 3.603,06 | t | | |
| 107 | Metal screen | 4.156.00 | 92,70 | t | | |
| 108 | Manufacture of steel braces | 4.176.00 | 11,35 | t | | |
| 109 | Installation of steel braces | 4.178.00 | 11,35 | t | | |
| 110 | Tube forepoling of injected steel | 4.182.00 | 977,40 | kg | | |
| 111 | Injection of slurry cement for tube forepoling | 4.184.00 | 21,27 | m ³ | | |
| 112 | Installation of precast element | 4.204.00 | 2.636,26 | m ³ | | |
| 113 | Supply and installation of pre-stressed core slab thickness = 26.50 cm, average overload = 1.200 kg/m ² | 4.205.01 | 5.914,73 | m ² | | |
| 114 | Supply and installation of pre-stressed core slab thickness = 40,00 cm and average overload = 2.800 kg/m ² , maximum span 7.90m | 4.205.15 | 5.318,60 | m ² | | |
| 115 | Drilling of vertical jet grouting column 0.40 ≤ diameter < 0.80 m, reinforced with Schedule tube | 4.224.03 | 3.640,00 | m | | |
| 116 | Injection of slurry cement for vertical jet grouting columns 0.40 ≤ diameter < 0.80 m | 4.227.01 | 2.362,00 | m ³ | | |
| 117 | Fiber glass brace or anchor bolt | 4.231.00 | 560,00 | m | | |
| 118 | Fugenband 0-35 warterstop or similar | 4.258.00 | 322,64 | m | | |
| 119 | Silicone putty | 4.260.00 | 227,64 | m | | |
| 120 | Anchor bolts, anchors, and gusset plates | 4.264.00 | 986,00 | kg | | |
| 121 | Bar to eliminate leakage current | 4.266.00 | 5,37 | t | | |

| | | | | | | |
|-----|--|----------|--------------|----------------|---|--|
| 122 | Drilling in shotcrete Ø 5 1/4" in primary cladding wall | 4.284,00 | 1.100,00 | cm | | |
| | | | | | | |
| | <u>WATERPROOFING</u> | | | | | |
| 123 | Flexible waterproofing with thermoplastic lining for tunnels | 5.001,00 | 7.892,40 | m ² | | |
| 124 | Flexible waterproofing with structured asphalt lining | 5.009,00 | 5.829,00 | m ² | | |
| 125 | Bitumen paint | 5.016,00 | 123,00 | m ² | | |
| 126 | Crystallization waterproofing | 5.018,00 | 2.187,64 | m ² | | |
| 127 | Concrete block masonry | 5.100,00 | 29,28 | m ³ | | |
| 128 | Mechanical protection reinforced mortar | 5.101,00 | 1,40 | m ³ | | |
| 129 | Cement and sand mortar | 5.102,00 | 235,78 | m ³ | | |
| 130 | Expanded Clay filler | 5.105,00 | 146,00 | m ³ | | |
| | | | | | | |
| | <u>URBANIZATION</u> | | | | | |
| 131 | Supply of PMSP guide blocks | 6.002,00 | 718,80 | m | | |
| 132 | Fixing of PMSP guide blocks | 6.004,00 | 718,80 | m | | |
| 133 | Concrete gutter | 6.006,00 | 287,48 | m ² | | |
| 134 | Box preparation | 6.008,00 | 2.064,00 | m ² | | |
| 135 | Cement treated well-graduated gravel – BGTC | 6.012,01 | 381,85 | m ³ | | |
| 136 | Hydraulic macadam | 6.014,00 | 1.153,89 | m ³ | | |
| 137 | Binder (open grain asphalt concrete) | 6.018,00 | 250,01 | m ³ | | |
| 138 | Asphalt concrete | 6.020,00 | 230,75 | m ³ | | |
| 139 | Bitumen binder primer | 6.021,00 | 3.846,26 | m ² | | |
| 140 | Rigid concrete pavement | 6.028,00 | 459,00 | m ³ | | |
| 141 | Flexible milling pavement | 6.042,00 | 2.590,55 | m ² | | |
| 142 | Concrete walkway | 6.100,00 | 215,50 | m ³ | | |
| | | | | | | |
| | <u>PIPING AND TUBES</u> | | | | | |
| 143 | Solid copper ground rod Ø 1" x 3 m | 7.261,00 | 44,00 | un | | |
| 144 | Electrolyte copper air termination system Ø 12,50 mm - L = 800 mm | 7.261,05 | 34,00 | un | | |
| 145 | Annealed bare copper cable 70 mm ² composed of 7 wires | 7.268,00 | 160,00 | m | | |
| | | | | | | |
| | <u>ADDITIONAL SERVICES</u> | | | | | |
| 146 | Relocation of fixed and tilting frames in Block A of the Vila Sônia Maintenance Yard | 8.400,00 | 1.128,96 | m ² | | |
| 147 | Recovery and installation of solar shading - Block A Vila Sônia Maintenance Yard | 8.420,00 | - | gl | - | |
| | | | | | | |
| | <u>METAL STRUCTURES, COVERS, AND CLOSING</u> | | | | | |
| 148 | Metal structure for cover and accesses | 9.002,00 | 1.463.415,80 | kg | | |

| | | | | | | |
|-----|--|-----------|------------|----------------|---|--|
| 149 | Metal structure for mezzanine – For activities in restricted hours | 9.004.30 | 79.665,61 | kg | | |
| 150 | Metal structure for yard/footbridge | 9.006.00 | 208.884,00 | kg | | |
| 151 | Tempered laminated glass cover 16 mm | 9.008.00 | 4.019,00 | m ² | | |
| 152 | Painted thermo acoustic metal tiles for roof | 9.010.00 | 10.031,07 | m ² | | |
| 153 | Painted trapezoidal metal tiles for roof | 9.012.00 | 2.178,00 | m ² | | |
| 154 | Cladding of metal structure with paint and finishing – fireproof (fire resistance time – TRRF of 90 minutes) | 9.014.00 | 18.804,50 | kg | | |
| 155 | Manufactured metal stairs with fire-galvanized coating | 9.015.00 | 14.903,50 | kg | | |
| | | | | | | |
| | <u>OTHERS</u> | | | | | |
| 156 | Sand ballast | 10.092.00 | 170,23 | m ³ | | |
| 157 | Availability of emergency services for mezzanine | 10.400.00 | 8,00 | month | | |
| | | | | | | |
| | <u>SIGNAGE AND TRAFFIC DETOURS</u> | | | | | |
| 158 | Supply and installation of vertical guidance signs | 30.200.00 | 47,92 | m ² | | |
| 159 | Supply and installation of vertical warning signs | 30.202.00 | 6,39 | m ² | | |
| 160 | Supply and installation of vertical regulatory signs | 30.204.00 | 13,89 | m ² | | |
| 161 | Relocation of vertical regulatory signs | 30.206.00 | 22,00 | un | | |
| 162 | Implementation of cold rolled white horizontal acrylic resin signage - type FX | 30.212.00 | 100,00 | m ² | | |
| 163 | Implementation of hot spray yellow horizontal thermoplastic signage – type FX | 30.218.00 | 60,00 | m ² | | |
| 164 | Implementation of hot spray white horizontal thermoplastic signage – type FX | 30.220.00 | 60,00 | m ² | | |
| 165 | Removal of hot spray thermoplastic paint | 30.221.00 | 412,09 | m ² | | |
| 166 | Supply and installation of pedestrian traffic light signage GF | 30.230.00 | 1,00 | un | | |
| 167 | Supply and installation of one-way reflective studs | 30.240.00 | 19,00 | un | | |
| 168 | Supply and installation of CET standard modular gate | 30.402.00 | 446,55 | m | | |
| | | | | | | |
| | <u>FINISHING</u> | | | | | |
| 169 | Cunha Gago Maintenance Base | - | - | gl | - | |
| 170 | Vila Sônia Bus Terminal | - | - | gl | - | |
| 171 | São Paulo - Morumbi Station | - | - | gl | - | |
| 172 | Higienópolis-Mackenzie Station | - | - | gl | - | |
| 173 | Oscar Freire Station | - | - | gl | - | |

| | | | | | | |
|--|--|---|---|----|---|---|
| 174 | Vila Sônia Maintenance Yard - Block A – Expansion of Maintenance Ditches | - | - | gl | - | |
| 175 | Vila Sônia Maintenance Yard - Block B/M | - | - | gl | - | |
| 176 | Vila Sônia Maintenance Yard - Block F | - | - | gl | - | |
| | | | | | | |
| | <u>VISUAL COMMUNICATION</u> | | | | | |
| 177 | Cunha Gago Maintenance Base | - | - | gl | - | |
| 178 | São Paulo – Morumbi Station | - | - | gl | - | |
| 179 | Vila Sônia Bus Terminal | - | - | gl | - | |
| 180 | Higienópolis-Mackenzie Station | - | - | gl | - | |
| 181 | Oscar Freire Station | - | - | gl | - | |
| 182 | Vila Sônia Maintenance Yard - Block A – Expansion of Maintenance Ditches | - | - | gl | - | |
| 183 | Vila Sônia Maintenance Yard - Block B/M | - | - | gl | - | |
| 184 | Vila Sônia Maintenance Yard – Block F | - | - | gl | - | |
| | | | | | | |
| | <u>HYDRAULIC</u> | | | | | |
| 185 | Cunha Gago Maintenance Base | - | - | gl | - | |
| 186 | São Paulo – Morumbi Station | - | - | gl | - | |
| 187 | Vila Sônia Bus Terminal | - | - | gl | - | |
| 188 | Higienópolis-Mackenzie Station | - | - | gl | - | |
| 189 | Oscar Freire Station | - | - | gl | - | |
| 190 | Vila Sônia Maintenance Yard - Block A – Expansion of Maintenance Ditches | - | - | gl | - | |
| 191 | Vila Sônia Maintenance Yard - Block B/M | - | - | gl | - | |
| 192 | Vila Sônia Maintenance Yard - Block F | - | - | gl | - | |
| 193 | Vila Sônia Maintenance Yard – General | - | - | gl | - | |
| | | | | | | |
| | <u>LANDSCAPING AND REURBANIZATION</u> | | | | | |
| 194 | Cunha Gago Maintenance Base | - | - | gl | - | |
| 195 | São Paulo – Morumbi Station | - | - | gl | - | |
| 196 | Vila Sônia Bus Terminal | - | - | gl | - | |
| 197 | Higienópolis-Mackenzie Station | - | - | gl | - | |
| 198 | Oscar Freire Station | - | - | gl | - | |
| | | | | | | |
| NOTE: Identification Block 1 | | | | | | |
| <i>HIGIENÓPOLIS MACKENZIE STATION, OSCAR FREIRE STATION, MORUMBI STATION, CUNHA GAGO MAINTENANCE BASE, VILA SONIA BUS TERMINAL AND VILA SONIA YARD</i> | | | | | | |
| TOTAL PRICE | | | | | | - |

BLOCK 2 - VCA, VSE -VENTILATION AND EMERGENCY EXIT- VILA SONIA, VILA SONIA STATION, TUNNELS, VSE-VENTILATION AND EMERGENCY EXIT- EDMUNDO LINS AND SE - EMERGENCY EXIT- DAVID MATARASSO

| DESCRIPTION | | ITEMS | | | TOTAL PRICE (BASE DATE) |
|---|--|-------|----|-----|-------------------------|
| | SUMMARY | | | | |
| | Preliminary services | 1 | to | 32 | - |
| | | | | | |
| | Earthmoving | 33 | to | 53 | - |
| | | | | | |
| | Foundations and Lowering | 54 | to | 132 | - |
| | | | | | |
| | Concrete | 133 | to | 176 | - |
| | | | | | |
| | Waterproofing | 177 | to | 185 | - |
| | | | | | |
| | Urbanization | 186 | to | 212 | - |
| | | | | | |
| | Piping and tubes | 213 | to | 260 | - |
| | | | | | |
| | Additional Services | 261 | to | 265 | - |
| | | | | | |
| | Metal Structures, Roofing/Cover, and Closing | 266 | to | 270 | - |
| | | | | | |
| | Other | 271 | to | 273 | - |
| | | | | | |
| | Signage and Traffic Detours | 274 | to | 340 | - |
| | | | | | |
| | Finishing | 341 | to | 344 | - |
| | | | | | |
| | Visual Communication | 345 | to | 352 | - |
| | | | | | |
| | Hydraulics | 353 | to | 361 | - |
| | | | | | |
| | Landscaping and Reurbanization | 362 | to | 365 | - |
| NOTE: Identification Block 2: VCA, VSE -VENTILATION AND EMERGENCY EXIT- VILA SONIA, VILA SONIA STATION, TUNNELS, VSE-VENTILATION AND EMERGENCY EXIT- EDMUNDO LINS AND SE - EMERGENCY EXIT- DAVID MATARASSO | | | | | |
| TOTAL PRICE | | | | | - |

| ITEM | DESCRIPTION | PRICE N° | QUANTITY | UN | PRICE (Base Date) | |
|------|--|----------|-----------|---------------------|-------------------|-------|
| | | | | | UNITARY | TOTAL |
| | <u>PRELIMINARY SERVICES</u> | | | | | |
| 1 | Demolition of basic concrete | 1.002.00 | 367,70 | m ³ | | |
| 2 | Demolition of reinforced concrete | 1.004.00 | 766,19 | m ³ | | |
| 3 | Demolition and removal of grout | 1.005.00 | 652,57 | m ³ | | |
| 4 | Demolition of concrete block | 1.006.00 | 113,43 | m ³ | | |
| 5 | Demolition of common brickwork | 1.008.00 | 32,20 | m ³ | | |
| 6 | Removal of relocated materials | 1.010.00 | 42,81 | t | | |
| 7 | Demolition of concrete walkway | 1.011.00 | 356,80 | m ³ | | |
| 8 | Demolition of asphalt pavement | 1.014.00 | 3.139,09 | m ³ | | |
| 9 | Removal of paving stone | 1.016.00 | 380,00 | m ² | | |
| 10 | Demolition of gutter | 1.020.00 | 1.491,96 | m ² | | |
| 11 | Removal of rail | 1.022.00 | 2.908,46 | m | | |
| 12 | Demolition of cement, brick, or tile walkway | 1.024.00 | 611,03 | m ² | | |
| 13 | Transport of relocated materials | 1.026.00 | 2.354,55 | t x km | | |
| 14 | Transport of paving stone | 1.028.00 | 5.700,00 | m ² x km | | |
| 15 | Transport of rail | 1.030.00 | 66.675,60 | m x km | | |
| 16 | Demolition of concrete cladding | 1.032.00 | 5.922,00 | m ³ | | |
| 17 | Removal of steel grid | 1.040.00 | 260,00 | m ² | | |
| 18 | Reinstallation of steel grid (for stored grid) | 1.042.00 | 575,00 | m ² | | |
| 19 | Fixed siding, h=2.20m with metal plate | 1.062.00 | 2.000,00 | m | | |
| 20 | Movable siding, h=1.15m with wood | 1.066.00 | 1.920,04 | m | | |
| 21 | Fixed siding, h=2.20m with wood | 1.068.00 | 611,69 | m | | |
| 22 | Fixed siding, h=2.20m with wood and wire mesh window | 1.070.00 | 1.065,42 | m | | |
| 23 | Fixed wire mesh siding, h=2.20m | 1.072.00 | 500,00 | m | | |
| 24 | Siding paint and temporary installations | 1.082.00 | 6.494,07 | m ² | | |
| 25 | Temporary pre-molded enclosure wall | 1.098.00 | 1.500,00 | m | | |

| | | | | | | |
|----|--|----------|------------|----------------|--|--|
| 26 | Removal of rigid New Jersey median barrier | 1.273.00 | 360,00 | m | | |
| 27 | Delivery and installation of metal guard rail | 1.275.00 | 336,00 | m | | |
| 28 | Removal and reconstitution of aerial electric power distribution line | 1.308.00 | 810,00 | m | | |
| 29 | Removal of light post | 1.309.00 | 27,00 | un | | |
| 30 | Removal of run-off piping | 1.390.00 | 101,50 | m | | |
| 31 | Removal of electric fence and infrared dividing wall | 1.400.00 | 1.100,00 | m | | |
| 32 | Implementation of electric fence and infrared screens | 1.402.00 | 1.150,00 | m | | |
| | | | | | | |
| | <u>EARTHMOVING</u> | | | | | |
| 33 | Combing and cleaning of terrain | 2.002.00 | 2.667,38 | m ² | | |
| 34 | Compacted landfill | 2.006.00 | 20.396,01 | m ³ | | |
| 35 | Mechanical excavation | 2.008.00 | 14.914,39 | m ³ | | |
| 36 | Spreading earth | 2.010.00 | 304.792,92 | m ³ | | |
| 37 | Spreading excavated material – rock | 2.011.00 | 38.778,28 | m ³ | | |
| 38 | Temporary protection fill | 2.014.00 | 26.140,55 | m ³ | | |
| 39 | Hydraulic fill with sand | 2.015.00 | 800,00 | m ³ | | |
| 40 | Mechanical excavation for foundations and ditches | 2.020.00 | 12.148,30 | m ³ | | |
| 41 | Trench excavation and underground stations | 2.022.00 | 163.647,10 | m ³ | | |
| 42 | Tunnel and station excavation using the NATM method | 2.026.00 | 98.351,83 | m ³ | | |
| 43 | Tunnel and station excavation using the NATM method in soft rock with explosives | 2.028.00 | 22.703,79 | m ³ | | |
| 44 | Tunnel and station excavation using the NATM method in hard rock with explosives | 2.030.00 | 7.955,29 | m ³ | | |
| 45 | Trench and underground stations excavation - rock | 2.032.00 | 8.119,20 | m ³ | | |
| 46 | Recovering of foundations and ditches | 2.044.00 | 11.596,53 | m ³ | | |
| 47 | Surface recovering of tunnel and stations | 2.046.00 | 28.085,72 | m ³ | | |
| 48 | Compacted cement ground | 2.047.00 | 1.552,61 | m ³ | | |
| 49 | Soil supply | 2.048.00 | 59.329,41 | m ³ | | |

| | | | | | | |
|----|---|----------|---------------|---------------------|--|--|
| 50 | Loading of soil at storage facility or warehouse | 2.050.00 | 59.329,39 | m ³ | | |
| 51 | Transport of earth (dmt = 50 km) [P=(0.0213+0.0382/d) x phc] | 2.060.00 | 17.295.225,50 | m ³ x km | | |
| 52 | Transport of excavated material – rock (dmt = 50 km) [P=(0.0239+0.0429/d) x phc] | 2.062.00 | 1.938.914,00 | m ³ x km | | |
| 53 | Tunnel execution using non-destructive method Ø 1.60m – upper generating line with 4 m coverage under roadway | 2.582.01 | 30,00 | m | | |
| | <u>FOUNDATIONS AND DRAWDOWN</u> | | | | | |
| 54 | Supply of metal profile delivered at work site | 3.001.00 | 2.396,85 | t | | |
| 55 | Metal profile cut | 3.008.00 | 153,33 | t | | |
| 56 | Metal profile closing | 3.010.00 | 153,33 | t | | |
| 57 | Driving of metal profile up to 2I-18" or H-400, included | 3.012.00 | 112,38 | t | | |
| 58 | Removal of metal profiles up to 2I-18" or H-400, included | 3.024.00 | 112,38 | t | | |
| 59 | Assembly of connection point | 3.028.00 | 2.173,90 | t | | |
| 60 | Supply and assembly of bracing or clamping | 3.030.00 | 212,19 | t | | |
| 61 | Disassembly of connection point | 3.032.00 | 2.173,90 | t | | |
| 62 | Disassembly of bracing or clamping | 3.034.00 | 212,19 | t | | |
| 63 | Support structure for existing pipes | 3.041.00 | 16.612,18 | kg | | |
| 64 | Installation of wood planks | 3.042.00 | 107,15 | m ³ | | |
| 65 | Removal of wood planks | 3.044.00 | 109,57 | m ³ | | |
| 66 | External transport of wood planks | 3.046.00 | 4.177,89 | m ³ x km | | |
| 67 | Supply of wood planks | 3.048.00 | 118,19 | m ³ | | |
| 68 | Tie rods 40 t, anchored section cost | 3.068.00 | 109,00 | m | | |
| 69 | Tie rods 40 t, linear cost | 3.070.00 | 2.136,00 | m | | |
| 70 | Tie rods 60 t, anchored section cost | 3.072.00 | 498,00 | m | | |
| 71 | Tie rods 60 t, linear cost | 3.074.00 | 14.491,50 | m | | |
| 72 | Tie rods 80 t, anchored section cost | 3.075.00 | 653,00 | m | | |

| | | | | | | |
|----|--|----------|-----------|----------------|--|--|
| 73 | Tie rods 80 t, linear cost | 3.076.00 | 13.252,00 | m | | |
| 74 | Tie rods 100 t, anchored section cost | 3.076.01 | 321,00 | m | | |
| 75 | Tie rods 100 t, linear cost | 3.076.02 | 8.295,50 | m | | |
| 76 | Rod bar Ø 30 mm | 3.078.01 | 270,00 | m | | |
| 77 | Steel anchor bolts CA-50 Ø 12.5 mm attached with cement slurry, 20cm long, including drill holes | 3.079.02 | 531,00 | un | | |
| 78 | Steel anchor bolts CA-50 Ø 16.0 mm attached with cement slurry, 20cm long, including drill holes | 3.079.04 | 475,20 | un | | |
| 79 | Steel anchor bolts CA-50 Ø 12.5 mm attached with cement slurry in 3" drill holes | 3.079.05 | 1.416,00 | m | | |
| 80 | Steel anchor bolts CA-50 Ø 20.0 mm attached with cement slurry, including drill holes | 3.079.06 | 1.746,53 | m | | |
| 81 | Diaphragm wall excavation with supply and application of bentonite | 3.090.00 | 11.449,73 | m ³ | | |
| 82 | Diaphragm wall excavation with supply and application of bentonite SPT > 50 blows | 3.090.02 | 3.050,00 | m ³ | | |
| 83 | Diaphragm wall execution | 3.092.00 | 14.499,73 | m ³ | | |
| 84 | Supply and application of sand in tubes installed in diaphragm wall | 3.097.01 | 20,00 | m ³ | | |
| 85 | Supply and placement of PVC Ø 30 cm for execution of diaphragm pins | 3.097.02 | 210,00 | m | | |
| 86 | Supply and pouring of grout | 3.099.00 | 1.093,61 | m ³ | | |
| 87 | Excavation with bentonite for station and pillars | 3.152.00 | 1.231,56 | m ³ | | |
| 88 | Root-type pile Ø 25 cm for 30 tf load - ground | 3.203.00 | 42,00 | m | | |
| 89 | Root-type pile Ø 25 cm for 40 tf - ground | 3.203.01 | 529,00 | m | | |
| 90 | Root-type pile Ø 31 cm for 50 tf < load <= 80 tf - ground | 3.210.00 | 794,70 | m | | |

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|-----|---|----------|----------|-----|--|--|
| 91 | Rotational drilling with direct circulation for drill holes up to Ø 30 cm, without cladding | 3.302.00 | 198,63 | m | | |
| 92 | Rotational drilling with direct circulation for drill holes up to Ø 30 cm, with full cladding | 3.304.00 | 3.737,72 | m | | |
| 93 | Rotational drilling with direct circulation for drill holes up to Ø 40 cm, with full cladding | 3.304.01 | 3.084,00 | m | | |
| 94 | Rotational drilling with direct circulation for drill holes up to Ø 30 cm, with full cladding in rock | 3.305.00 | 168,00 | m | | |
| 95 | Rotational drilling with reverse circulation for Ø 40 cm drill holes | 3.306.00 | 5.865,04 | m | | |
| 96 | Roto percussion drilling with direct circulation for Ø 30 cm drill holes | 3.311.01 | 1.200,00 | m | | |
| 97 | Driving of cladding pipe in rotational drilling with reverse circulation for Ø 40 cm drill holes | 3.312.00 | 5.865,04 | m | | |
| 98 | Implementation of drilled gravitational shaft Ø 30 cm | 3.350.00 | 3.692,05 | m | | |
| 99 | Implementation of drilled gravitational shaft Ø 40 cm | 3.352.00 | 3.871,64 | m | | |
| 100 | Implementation of parallel tube injectors | 3.358.00 | 7.336,62 | m | | |
| 101 | Implementation of shaft for vacuum application, drilled Ø 40 cm | 3.360.00 | 4.956,29 | m | | |
| 102 | Implementation of filter tips up to Ø 1 1/2" for pre-drill | 3.368.00 | 1.620,00 | un | | |
| 103 | Implementation of injected filter tip up to Ø 1 1/2" | 3.370.00 | 78,00 | un | | |
| 104 | Implementation of submerged pump, automatic control, and alarm system | 3.372.00 | 169,00 | un | | |
| 105 | Implementation of vacuum pumps for gravitational shafts | 3.374.01 | 29,00 | set | | |
| 106 | Implementation of pump set for injector | 3.376.01 | 17,00 | set | | |
| 107 | Implementation of pump set for filter tips | 3.380.01 | 74,00 | set | | |

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|-----|---|----------|------------|----------------|--|--|
| 108 | Implementation of water collection pipe Ø 4" | 3.382.00 | 3.628,74 | m | | |
| 109 | Implementation of water collection pipe Ø 6" | 3.384.00 | 0,00 | m | | |
| 110 | Implementation of collection pipes for filter tips Ø 4" | 3.394.00 | 3.084,00 | m | | |
| 111 | Implementation of collection pipes for filter tips Ø 6" | 3.396.00 | 80,00 | m | | |
| 112 | Implementation of water meter 10 m ³ /h | 3.398.00 | 120,00 | un | | |
| 113 | Implementation of emergency generator | 3.404.00 | 11,00 | un | | |
| 114 | Availability of submerged pump with Q ≤ 7,5 m ³ /h capacity | 3.450.00 | 7.768,00 | un x day | | |
| 115 | Operation of submerged pump with Q ≤ 7,5 m ³ /h capacity | 3.454.00 | 62.820,00 | un x day | | |
| 116 | Availability of emergency generator | 3.458.00 | 394.297,04 | kVA x day | | |
| 117 | Operation of emergency generator | 3.460.00 | 43.843,90 | kVA x h | | |
| 118 | Operation of pump set for injectors | 3.462.01 | 19.260,00 | set x day | | |
| 119 | Operation of vacuum pump set for gravitational shafts | 3.464.01 | 7.820,00 | set x day | | |
| 120 | Operation of pump set for tips | 3.468.01 | 2.597,00 | set x day | | |
| 121 | Protective box with pre-manufactured concrete rings for shafts and ejectors in high-traffic areas | 3.480.00 | 256,00 | un | | |
| 122 | Sand drainage, only for filter sand | 3.488.00 | 440,00 | m | | |
| 123 | Gravel drainage with geotextile lining | 3.490.00 | 1.083,77 | m | | |
| 124 | Gravel mattress | 3.493.00 | 1.683,34 | m ³ | | |
| 125 | Short drainage Ø 10 cm - L = 0,70 m (barbican) | 3.496.00 | 366,00 | un | | |
| 126 | PVC Pipe Ø 2" for drainage | 3.502.00 | 756,05 | m | | |
| 127 | PVC Pipe Ø 4" for drainage | 3.503.00 | 1.520,72 | m | | |
| 128 | PVS Pipe Ø 6" for drainage | 3.505.00 | 178,70 | m | | |
| 129 | Gravel rock for filter | 3.800.00 | 50,00 | m ³ | | |
| 130 | Geotextile Lining | 3.804.00 | 49.459,90 | m ² | | |
| 131 | Deep horizontal drainage | 3.808.00 | 26.420,37 | m | | |
| 132 | Installation and operation of vacuum | 3.812.01 | 1.839,00 | set x day | | |

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|-----|--|----------|------------|----------------|--|--|
| | pumps for DHD | | | | | |
| | | | | | | |
| | <u>CONCRETE</u> | | | | | |
| 133 | Concrete 4.0 ≤ fck < 6.0 MPa | 4.004.00 | 103,80 | m ³ | | |
| 134 | Concrete 8.0 ≤ fck < 12.0 MPa | 4.008.00 | 19.810,26 | m ³ | | |
| 135 | Concrete 12.0 ≤ fck < 15.0 MPa | 4.010.00 | 1.017,44 | m ³ | | |
| 136 | Concrete 15.0 ≤ fck < 18.0 MPa | 4.012.00 | 83,20 | m ³ | | |
| 137 | Concrete 20.0 ≤ fck < 24.0 MPa | 4.016.00 | 507,84 | m ³ | | |
| 138 | Concrete 24.0 ≤ fck < 27.0 MPa | 4.018.00 | 299,35 | m ³ | | |
| 139 | Concrete 30.0 ≤ fck < 34.0 MPa | 4.024.00 | 45.772,31 | m ³ | | |
| 140 | Concrete 30.0 ≤ fck < 34.0 MPa for diaphragm wall, station/pillars | 4.025.00 | 14.675,48 | m ³ | | |
| 141 | Concrete 34.0 ≤ fck < 37,0 MPa | 4.026.00 | 33.751,50 | m ³ | | |
| 142 | Concrete 42.0 ≤ fck < 45,0 MPa | 4.029.00 | 50,00 | m ³ | | |
| 143 | Supply and application of shotcrete 24.0 ≤ fck < 27.0 MPa | 4.038.00 | 22.433,57 | m ³ | | |
| 144 | Concrete release | 4.050.00 | 101.395,70 | m ³ | | |
| 145 | Cast for tunnel and underground station | 4.100.00 | 26.392,39 | m ² | | |
| 146 | Cast for foundation | 4.102.00 | 1.036,11 | m ² | | |
| 147 | Cast for stations and building | 4.104.00 | 56.393,00 | m ² | | |
| 148 | Cast for box caisson | 4.108.00 | 503,40 | m ² | | |
| 149 | Cast for precast concrete elements | 4.110.00 | 5.850,60 | m ² | | |
| 150 | Metallic slipform for "mining" system | 4.112.00 | 45.104,73 | m ² | | |
| 151 | Shuttering tiles | 4.130.00 | 164.421,37 | m ³ | | |
| 152 | Shuttering tiles with use of modulated lattice girders | 4.132.00 | 3.377,84 | m ² | | |
| 153 | Steel CA - 50 – supply | 4.136.00 | 2.853,57 | t | | |
| 154 | Steel CA - 50 – supply and installation | 4.142.00 | 15.633,43 | t | | |
| 155 | Steel CA - 50 – supply and installation for station/pillars | 4.145.00 | 106,48 | t | | |
| 156 | Screw down gloves for sealing of steel bars CA-50 - Ø 25mm | 4.146.05 | 1.504,00 | un | | |
| 157 | Screw down gloves for sealing of steel bars CA-50 - Ø 32mm | 4.146.06 | 4.267,00 | un | | |

| | | | | | | |
|-----|---|----------|------------|----------------|--|--|
| 158 | Supply and application of steel fiber for shotcrete | 4.148.00 | 10,58 | t | | |
| 159 | Metal screen | 4.156.00 | 1.698,30 | t | | |
| 160 | Manufacture of steel braces | 4.176.00 | 400,48 | t | | |
| 161 | Installation of steel braces | 4.178.00 | 400,60 | t | | |
| 162 | Forepoling of fiberglass rebar installed in pre-drilled hole Ø 2 1/2" | 4.180.01 | 2.090,00 | m | | |
| 163 | Tube forepoling of injected steel | 4.182.00 | 6.418,56 | kg | | |
| 164 | Injected forepoling of continuous bulb with CCPH Ø 20 cm and steel tube SCH 40 Ø 2 1/2" | 4.182.02 | 1.056,00 | m | | |
| 165 | Injection of slurry cement for tube forepoling | 4.184.00 | 47,47 | m ³ | | |
| 166 | Injection of slurry cement for fiber glass forepoling | 4.184.01 | 8,94 | m ³ | | |
| 167 | Injection of slurry cement for - bentonite | 4.186.00 | 31,20 | m ³ | | |
| 168 | Installation of precast element | 4.204.00 | 4.471,80 | m ³ | | |
| 169 | Horizontal Jet-grouting forepoling 0.30 m ≤ diameter < 0.50 m | 4.220.00 | 5.700,00 | m | | |
| 170 | Horizontal Jet-grouting forepoling 0.50 m ≤ diameter < 0.80 m | 4.222.00 | 159.850,10 | m | | |
| 171 | Consolidation injection | 4.228.01 | 25,00 | m ³ | | |
| 172 | Jeen structural elastic joint or similar | 4.248.00 | 549,50 | m | | |
| 173 | Fugenband 0-22 warterstop or similar | 4.256.00 | 1.162,11 | m | | |
| 174 | Bar to eliminate leakage current | 4.266.00 | 48,02 | t | | |
| 175 | Drilling in shotcrete Ø 5 1/4" in primary cladding wall | 4.284.00 | 1.100,00 | cm | | |
| 176 | Drill hole Ø to 25mm on concrete structure attached with epoxy resin | 4.304.00 | 345,00 | m | | |
| | | | | | | |
| | <u>WATERPROOFING</u> | | | | | |
| 177 | Flexible waterproofing with thermoplastic lining for tunnels | 5.001.00 | 93.386,81 | m ² | | |
| 178 | Flexible waterproofing with structured asphalt | 5.009.00 | 88,45 | m ² | | |

| | | | | | | |
|-----|---|----------|-----------|----------------|--|--|
| | lining | | | | | |
| 179 | Asphalt lining 3 mm | 5.009.01 | 136,00 | m ² | | |
| 180 | Asphalt lining 4 mm | 5.009.02 | 1,10 | m ² | | |
| 181 | Waterproof mortar | 5.010.00 | 90,86 | m ² | | |
| 182 | Crystallization waterproofing | 5.018.00 | 1.915,45 | m ² | | |
| 183 | Solid brick masonry | 5.090.00 | 4,00 | m ³ | | |
| 184 | Concrete block masonry | 5.100.00 | 1.139,25 | m ³ | | |
| 185 | Stainless steel plate thickness = 2.0mm - 220 mm x 220 mm | 5.400.00 | 283,00 | un | | |
| | | | | | | |
| | <u>URBANIZATION</u> | | | | | |
| 186 | Supply of PMSP guide blocks | 6.002.00 | 5.654,72 | m | | |
| 187 | Fixing of PMSP guide blocks | 6.004.00 | 5.549,57 | m | | |
| 188 | Concrete gutter | 6.006.00 | 3.654,56 | m ² | | |
| 189 | Box preparation | 6.008.00 | 47.943,09 | m ² | | |
| 190 | Well-graduated gravel | 6.012.00 | 3.874,12 | m ³ | | |
| 191 | Cement treated well-graduated gravel – BGTC | 6.012.01 | 3.718,26 | m ³ | | |
| 192 | Hydraulic macadam | 6.014.00 | 2.372,48 | m ³ | | |
| 193 | Dry macadam | 6.015.00 | 360,56 | m ³ | | |
| 194 | Binder (open grain asphalt concrete) | 6.018.00 | 1.951,01 | m ³ | | |
| 195 | Asphalt concrete | 6.020.00 | 4.549,01 | m ³ | | |
| 196 | Bitumen binder primer | 6.021.00 | 90.130,80 | m ² | | |
| 197 | Bitumen waterproof primer | 6.022.00 | 21.556,31 | m ² | | |
| 198 | Rigid concrete pavement | 6.028.00 | 1.540,00 | m ³ | | |
| 199 | Lean rolled concrete | 6.038.00 | 546,04 | m ³ | | |
| 200 | Cracked rock base | 6.040.00 | 2.974,75 | m ³ | | |
| 201 | Flexible milling pavement | 6.042.00 | 50.613,80 | m ² | | |
| 202 | Washed sand or recycled aggregate | 6.044.00 | 401,60 | m ³ | | |
| 203 | Concrete walkway | 6.100.00 | 2.273,75 | m ³ | | |
| 204 | Interlocked concrete floor | 6.108.00 | 127,00 | m ² | | |
| 205 | Grass mats - Batatais | 6.152.00 | 640,00 | m ² | | |
| 206 | Channel with metal grille=30cm | 6.170.00 | 7,30 | m | | |
| 207 | Basic transition point – installation area – during restricted hours | 6.320.30 | 3,00 | un | | |
| 208 | Flanged posts with built-in conduit box – provisional during restricted hours | 6.340.30 | 42,00 | un | | |

| | | | | | | |
|-----|--|----------|-----------|----|--|--|
| 209 | Flanged posts with built-in conduit box - permanent during restricted hours | 6.342.30 | 30,00 | un | | |
| 210 | Flanged post with concrete base - provisional installation during restricted hours | 6.344.30 | 6,00 | un | | |
| 211 | Flanged post with concrete base - definitive installations during restricted times | 6.346.30 | 39,00 | un | | |
| 212 | Definitive relocation of public light posts | 6.350.30 | 18,00 | un | | |
| | | | | | | |
| | <u>PIPING AND TUBES</u> | | | | | |
| 213 | Cast iron tubes series TK-9JE to Ø 300 mm, included | 7.002.00 | 18.523,95 | kg | | |
| 214 | Cast iron pipes series TK-9JE greater than Ø 300 mm | 7.004.00 | 5.700,00 | kg | | |
| 215 | Cast iron pipes series TK-7JE up to Ø 300 mm, including | 7.006.00 | 2.203,00 | kg | | |
| 216 | Cast iron pipes series TK-7JE greater than Ø 300 mm | 7.008.00 | 44.157,50 | kg | | |
| 217 | Valves up to Ø 50 mm | 7.010.00 | 3,00 | un | | |
| 218 | Valves Ø 75 mm -150 mm | 7.012.00 | 5,00 | un | | |
| 219 | PVC pipe Ø 6" for sewage system | 7.120.00 | 27,05 | m | | |
| 220 | PVC pipe Ø 8" for sewage system | 7.122.00 | 240,00 | m | | |
| 221 | PVC pipes Ø 3" for water system | 7.123.00 | 950,00 | m | | |
| 222 | PVC pipe Ø 4" for water system | 7.124.00 | 10,00 | m | | |
| 223 | Single concrete pipe Ø 150 mm | 7.130.00 | 6,07 | m | | |
| 224 | Reinforced concrete pipe Ø 400 mm | 7.152.00 | 63,00 | m | | |
| 225 | Reinforced concrete pipe Ø 500 mm | 7.154.00 | 130,00 | m | | |
| 226 | Reinforced concrete pipes Ø 600 mm | 7.156.00 | 178,50 | m | | |
| 227 | Reinforced concrete pipe Ø 700 mm | 7.158.00 | 265,00 | m | | |
| 228 | Reinforced concrete pipe Ø 800 mm | 7.160.00 | 30,00 | m | | |
| 229 | Reinforced concrete pipe Ø 1000 mm | 7.164.00 | 33,00 | m | | |
| 230 | Concrete drainage pipe | 7.182.00 | 1.100,00 | m | | |

| | | | | | | |
|-----|---|----------|----------|----------------|--|--|
| | Ø 300 mm | | | | | |
| 231 | Half-round channels Ø 40 cm | 7.183.01 | 53,00 | m | | |
| 232 | Discontinuous wood shoring | 7.186.00 | 1.901,50 | m ² | | |
| 233 | Masonry cladded conduit box for underground ducts (90 x 90 cm) | 7.189.00 | 4,00 | un | | |
| 234 | PVC conduit Ø 100 mm | 7.190.00 | 1.440,00 | m | | |
| 235 | PVC conduit | 7.202.00 | 2.865,00 | kg | | |
| 236 | Standard SABESP T -75 plug | 7.220.00 | 3,00 | un | | |
| 237 | PMSP standard T-120 plug | 7.222.00 | 7,00 | un | | |
| 238 | PMSP cast iron grill | 7.250.00 | 190,00 | kg | | |
| 239 | Supply of metal grills | 7.251.00 | 8.985,60 | kg | | |
| 240 | Execution of PMSP standard manhole | 7.252.00 | 7,00 | un | | |
| 241 | PMSP standard triple sewer grates | 7.253.00 | 7,00 | un | | |
| 242 | PMSP standard sewer grates | 7.254.00 | 12,00 | un | | |
| 243 | PMSP standard double sewer grates | 7.255.00 | 2,00 | un | | |
| 244 | Execution of masonry manhole | 7.259.00 | 11,00 | un | | |
| 245 | Solid copper ground rod Ø 1" x 3 m | 7.261.00 | 17,00 | un | | |
| 246 | Grounding inspection box with metal cover | 7.261.01 | 61,00 | un | | |
| 247 | Steel air termination Ø 1/2" de 600 mm with dome head | 7.261.02 | 28,00 | un | | |
| 248 | Electrolyte copper air termination system Ø 12,50 mm - L =800 mm | 7.261.05 | 18,00 | un | | |
| 249 | CS box – TELESP standard | 7.262.00 | 5,00 | un | | |
| 250 | Common brick masonry for manhole | 7.265.00 | 16,50 | m | | |
| 251 | #7 cable CTS-APL 40 – 2,400 pairs measuring 110 m long | 7.266.00 | 1.200,00 | m | | |
| 252 | Annealed bare copper cable 70 mm ² composed of 7 wires | 7.268.00 | 1.057,50 | m | | |
| 253 | Annealed bare copper cable 50 mm ² composed of 7 wires | 7.268.01 | 295,00 | m | | |
| 254 | Annealed bare copper cable 35 mm ² composed of 7 wires | 7.268.03 | 24,00 | m | | |
| 255 | Insulated copper cable | 7.269.00 | 180,00 | m | | |

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|-----|--|-----------|------------|----------------|--|--|
| | 70 mm ² - insulation 1kV | | | | | |
| 256 | PMSP standard double sewer grates | 7.270.00 | 7,00 | un | | |
| 257 | PMSP standard basic sewer with no articulated screen | 7.272.00 | 14,00 | un | | |
| 258 | Supply and installation of ductile steel adductor - Ø250 mm | 7.916.00 | 180,00 | m | | |
| 259 | Supply and installation of ductile steel adductor - Ø 300 mm | 7.918.00 | 180,00 | m | | |
| 260 | Supply and installation of ductile steel adductor -Ø 500 mm | 7.920.00 | 412,00 | m | | |
| | | | | | | |
| | <u>ADDITIONAL SERVICES</u> | | | | | |
| 261 | Completion of relocation of fire suppression system | 8.402.00 | 70,00 | m | | |
| 262 | Reconstitution of fiber optic | 8.404.00 | 2,00 | un | | |
| 263 | Relocation of low-tension wires | 8.406.00 | 270,00 | m | | |
| 264 | Relocation of fiber optic cables | 8.408.00 | 580,00 | m | | |
| 265 | Hand rail in tunnel | 8.410.00 | 3.150,00 | m | | |
| | | | | | | |
| | <u>METAL STRUCTURES, COVERS, AND CLOSING</u> | | | | | |
| 266 | Metal structure for cover and accesses | 9.002.00 | 108.550,40 | kg | | |
| 267 | Metal structure for traffic detour | 9.007.00 | 49.084,00 | kg | | |
| 268 | Metal structure to support adductor | 9.007.01 | 5.300,00 | kg | | |
| 269 | Cladding of metal structure with paint and finishing – fireproof (fire resistance time – TRRF of 90 minutes) | 9.014.00 | 18.804,50 | kg | | |
| 270 | Manufactured metal stairs with fire-galvanized coating | 9.015.00 | 14.903,50 | kg | | |
| | | | | | | |
| | <u>OTHERS</u> | | | | | |
| 271 | Crushed rock ballast | 10.090.00 | 6,29 | m ³ | | |
| 272 | Sand ballast | 10.092.00 | 250,19 | m ³ | | |
| 273 | Anti-pollution layer | 10.097.00 | 5.439,75 | m ³ | | |
| | | | | | | |

| | <u>SIGNAGE AND TRAFFIC DETOURS</u> | | | | | |
|-----|--|-----------|----------|----------------|--|--|
| 274 | Supply and installation of vertical guidance signs | 30.200.00 | 104,92 | m ² | | |
| 275 | Supply and installation of vertical warning signs | 30.202.00 | 18,31 | m ² | | |
| 276 | Supply and installation of vertical regulatory signs | 30.204.00 | 63,22 | m ² | | |
| 277 | Supply and installation of vertical construction work signs | 30.205.00 | 148,82 | m ² | | |
| 278 | Removal of vertical construction work signs | 30.205.01 | 66,00 | un | | |
| 279 | Removal of wood prop posts | 30.205.02 | 385,40 | m | | |
| 280 | Relocation of vertical regulatory signs | 30.206.00 | 99,40 | un | | |
| 281 | Relocation of vertical guidance signs | 30.206.01 | 24,00 | un | | |
| 282 | Relocation of vertical warning signs | 30.206.02 | 5,00 | un | | |
| 283 | Rotation or removal of vertical regulatory signs | 30.208.00 | 130,00 | un | | |
| 284 | Rotation or removal of vertical warning signs | 30.208.01 | 194,00 | un | | |
| 285 | Rotation or removal of vertical guidance signs | 30.208.02 | 6,00 | un | | |
| 286 | Rotation or removal of vertical construction work signs | 30.208.03 | 77,00 | un | | |
| 287 | Supply and installation of wood prop posts | 30.210.00 | 1.041,00 | m | | |
| 288 | Implementation of cold rolled white horizontal acrylic resin signage - type FX | 30.212.00 | 546,61 | m ² | | |
| 289 | Implementation of white extruded thermoplastic signage - type FX | 30.214.00 | 1.951,24 | m ² | | |
| 290 | Implementation of yellow extruded thermoplastic signage - type FX | 30.214.01 | 980,46 | m ² | | |
| 291 | Removal of extruded horizontal thermoplastic signage | 30.216.00 | 1.081,12 | m ² | | |
| 292 | Removal of acrylic resin paint | 30.217.00 | 12,00 | m ² | | |
| 293 | Implementation of hot spray yellow horizontal thermoplastic signage - type FX | 30.218.00 | 453,00 | m ² | | |

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|-----|--|-----------|----------|----------------|--|--|
| 294 | Implementation of hot spray white horizontal thermoplastic signage – type FX | 30.220.00 | 1.920,71 | m ² | | |
| 295 | Removal of hot spray thermoplastic paint | 30.221.00 | 600,00 | m ² | | |
| 296 | Supply and installation of traffic light signage GFV222 | 30.222.00 | 91,00 | un | | |
| 297 | Removal of composite traffic light signage GFV222 | 30.224.00 | 30,00 | un | | |
| 298 | Supply and installation of basic traffic light signage GFV222 | 30.226.00 | 20,00 | un | | |
| 299 | Removal of basic traffic light signage GFV222 | 30.228.00 | 78,00 | un | | |
| 300 | Relocation of basic traffic light signage GFV222 | 30.228.02 | 4,00 | un | | |
| 301 | Relocation of composite traffic light signage GFV222 | 30.228.03 | 4,00 | un | | |
| 302 | Supply and installation of pedestrian traffic light signage GF | 30.230.00 | 68,00 | un | | |
| 303 | Removal of pedestrian traffic light signage GF | 30.232.00 | 17,00 | un | | |
| 304 | Supply and installation of composite traffic light signage SPST | 30.234.00 | 75,00 | un | | |
| 305 | Removal of vehicle traffic signage SPST | 30.236.00 | 44,00 | un | | |
| 306 | Removal of pedestrian traffic light signage SPST | 30.238.00 | 11,00 | un | | |
| 307 | Supply and installation of one-way reflective studs | 30.240.00 | 634,00 | un | | |
| 308 | Removal of two-way reflective studs | 30.241.00 | 258,00 | un | | |
| 309 | Supply and installation of GF repeater column | 30.242.00 | 14,00 | un | | |
| 310 | Supply and installation of single SEMCO column | 30.243.01 | 52,00 | un | | |
| 311 | Removal of GF repeater column | 30.244.00 | 12,00 | un | | |
| 312 | Supply and installation of arm drive | 30.246.00 | 88,00 | un | | |
| 313 | Relocation of arm drive | 30.246.01 | 48,00 | un | | |
| 314 | Removal of arm drive | 30.247.00 | 25,00 | un | | |
| 315 | Removal of single SEMCO column | 30.247.01 | 14,00 | un | | |

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|-----|--|-----------|----------|------------------------|--|--|
| 316 | Supply and positioning of P-57 – Metal column 4" x 3.75 mm x 5.25 m + Arm 3" x 3.75 mm | 30.257.00 | 2,00 | un | | |
| 317 | Supply and positioning of P-55 – Light Arm 3" x 3.75 mm x 2.70 m | 30.257.01 | 2,00 | un | | |
| 318 | Supply and installation of vehicle siding (with nocturnal lighting) | 30.258.00 | 2.221,00 | m | | |
| 319 | Movable siding with plastic screen, h=1,10m (pedestrian) | 30.260.01 | 700,00 | m | | |
| 320 | Movable siding with plastic screen, h=3.20m (pedestrian) | 30.260.02 | 204,00 | m | | |
| 321 | PP cable 2 x 1.5mm ² | 30.272.01 | 126,00 | m | | |
| 322 | PP cable 4 x 1.5mm ² | 30.272.02 | 3.068,20 | m | | |
| 323 | Flexible cable 4mm ² (grounding) | 30.272.03 | 1.774,30 | m | | |
| 324 | Supply and installation of conduit box – Standard ILUME | 30.278.00 | 15,00 | un | | |
| 325 | Supply and installation of standard metal post | 30.280.00 | 128,00 | un | | |
| 326 | Removal of metal post | 30.282.00 | 73,00 | un | | |
| 327 | Relocation of metal post | 30.284.00 | 46,00 | un | | |
| 328 | Supply and installation of concrete prism | 30.290.00 | 62,00 | un | | |
| 329 | Supply and installation of guide lane | 30.301.00 | 31,40 | m ² | | |
| 330 | Supply and installation of illuminated super cones | 30.303.00 | 45,00 | un | | |
| 331 | Supply and installation of flashing arrow | 30.305.00 | 1,00 | un | | |
| 332 | Supply and installation of standard CET stand | 30.307.00 | 4,00 | un | | |
| 333 | Supply and installation of low reflection siding | 30.309.00 | 700,00 | m | | |
| 334 | Supply and installation of lighting for siding | 30.309.02 | 875,00 | un | | |
| 335 | Removal of one-way reflective studs | 30.316.00 | 410,00 | un | | |
| 336 | Relocation of P-51b – metal column 4" x 3.75 x 6.00 m | 30.317.00 | 1,00 | un | | |
| 337 | Removal of single concrete barrier | 30.318.00 | 418,95 | un | | |
| 338 | Removal of double concrete barrier | 30.320.00 | 36,70 | un | | |
| 339 | Location of New Jersey median barrier | 30.401.00 | 1.854,00 | m ² x month | | |

| | | | | | | |
|-----|---|-----------|--------|----|---|--|
| 340 | Supply and installation of CET standard modular gate | 30.402.00 | 608,00 | m | | |
| | | | | | | |
| | <u>FINISHING</u> | | | | | |
| 341 | Vila Sônia Station | - | - | gl | - | |
| 342 | Ventilation and Emergency Exit – Vila Sônia - | - | - | gl | - | |
| 343 | Ventilation and Emergency Exit – Edmundo Lins | - | - | gl | - | |
| 344 | Emergency Exit – David Matarasso | - | - | gl | - | |
| | | | | | | |
| | <u>VISUAL COMMUNICATION</u> | | | | | |
| 345 | Vila Sônia Station | - | - | gl | - | |
| 346 | VCA Tunnel between access yard and NATM section | - | - | gl | - | |
| 347 | NATM Tunnel between VCA and Vila Sônia Station | - | - | gl | - | |
| 348 | Double NATM Tunnel between Vila Sônia Station and Ventilation and Emergency Exit – Edmundo Lins | - | - | gl | - | |
| 349 | Double NATM Tunnel between Ventilation and Emergency Exit – Edmundo Lins and Tímpano | - | - | gl | - | |
| 350 | Ventilation and Emergency Exit – Vila Sônia | - | - | gl | - | |
| 351 | Ventilation and Emergency Exit – Edmundo Lins | - | - | gl | - | |
| 352 | Emergency Exit David Matarasso | - | - | gl | - | |
| | | | | | | |
| | <u>HYDRAULIC</u> | | | | | |
| 353 | Vila Sônia Station | - | - | gl | - | |
| 354 | VCA Tunnel between access yard and NATM section | - | - | gl | - | |
| 355 | NATM Tunnel between VCA and Vila Sônia Station | - | - | gl | - | |
| 356 | Double NATM Tunnel between Vila Sônia Station and Ventilation | - | - | gl | - | |

| | | | | | | |
|--|---|---|---|----|---|---|
| | and Emergency Exit – Edmundo Lins | | | | | |
| 357 | Double NATM Tunnel between Ventilation and Emergency Exit – Edmundo Lins and Tímpano | - | - | gl | - | |
| 358 | Single NATM Tunnel between Vila Sônia Station and Ventilation and Emergency Exit – Edmundo Lins | - | - | gl | - | |
| 359 | Ventilation and Emergency Exit – Vila Sônia | - | - | gl | - | |
| 360 | Ventilation and Emergency Exit – Edmundo Lins | - | - | gl | - | |
| 361 | Emergency Exit – David Matarasso | - | - | gl | - | |
| | | | | | | |
| | <u>LANDSCAPING AND REURBANIZATION</u> | | | | | |
| 362 | Vila Sônia Station | - | - | gl | - | |
| 363 | Ventilation and Emergency Exit – Vila Sônia | - | - | gl | - | |
| 364 | Ventilation and Emergency Exit – Edmundo Lins | - | - | gl | - | |
| 365 | Emergency Exit – David Matarasso | - | - | gl | - | |
| <i>NOTE: Identification Block 2: VCA, VSE -VENTILATION AND EMERGENCY EXIT- VILA SONIA, VILA SONIA STATION, TUNNELS, VSE-VENTILATION AND EMERGENCY EXIT- EDMUNDO LINS AND SE - EMERGENCY EXIT- DAVID MATARASSO</i> | | | | | | |
| TOTAL PRICE | | | | | | - |

BLOCK 3 - GENERAL SERVICES, BUILDINGS FOR CONSTRUCTION SITE, OPERATION, MAINTENANCE, CLEANING AND SECURITY OF THE CONSTRUCTION SITE, BASIC NETWORKS, ENVIRONMENTAL MANAGEMENT, RISK MANAGEMENT, TREE MANAGEMENT, TREATMENT OF CONTAMINATED AREAS AND ARCHEOLOGY

| DESCRIPTION | ITEMS | | | TOTAL PRICE |
|---|-------|----|-----|-------------|
| | | | | (BASE DATE) |
| | | | | |
| SUMMARY | | | | |
| Preliminary services | 1 | to | 8 | |
| Foundations and Lowering | | | 9 | |
| General Services | 10 | to | 22 | |
| Tree Management | 23 | to | 42 | |
| Treatment and Monitoring of Contaminated Areas | 43 | to | 93 | |
| Archeology | 94 | to | 105 | |
| NOTE: Identification BLOCK 3 - GENERAL SERVICES, BUILDINGS FOR CONSTRUCTION SITE, OPERATION, MAINTENANCE, CLEANING AND SECURITY OF THE CONSTRUCTION SITE, BASIC NETWORKS, ENVIRONMENTAL MANAGEMENT, RISK MANAGEMENT, TREE MANAGEMENT, TREATMENT OF CONTAMINATED AREAS AND ARCHEOLOGY | | | | |
| TOTAL PRICE | | | | - |

| ITEM | DESCRIPTION | PRICE N° | QUANTITY | UN | PRICE (BASE DATE) | |
|------|---|-----------|----------|------------------------|-------------------|-------|
| | | | | | UNITARY | TOTAL |
| | <u>PRELIMINARY SERVICES</u> | | | | | |
| 1 | <i>Container</i> | 1.048.00 | 3.635,36 | m ² x month | | |
| 2 | Administrative buildings | 1.050.00 | 873,68 | m ² | | |
| 3 | Production buildings | 1.052.00 | 1.695,12 | m ² | | |
| 4 | Additional Buildings | 1.054.00 | 1.070,38 | m ² | | |
| 5 | Demolition of work site | 1.056.00 | 6.368,34 | m ² | | |
| 6 | Basic water, sewage, and drainage system | 1.058.00 | - | gl | - | |
| 7 | Basic lighting, power, and telephone system | 1.060.00 | - | gl | - | |
| 8 | Work site operation, maintenance, cleaning, and security | 1.088.00 | - | gl | - | |
| | <u>FOUNDATIONS AND DRAWDOWN</u> | | | | | |
| 9 | Drawdown control | 3.484.00 | 1.920,00 | day | | |
| | <u>GENERAL SERVICES</u> | | | | | |
| | <i>Environmental Management</i> | | | | | |
| 10 | Environmental Management Plan | 50.102.00 | 1,00 | un | | |
| 11 | Monthly Environmental Management Plan Follow-Up Report | 50.104.00 | 42,00 | un | | |
| 12 | Technical report for authorization to intervene in Permanent Environmental Protection Area (APP) and plant management | 50.106.00 | 1,00 | un | | |
| 13 | Noise and vibration measurement report | 50.108.00 | 18,00 | un | | |
| 14 | Air Quality Monitoring Report | 50.109.00 | 42,00 | un | | |
| 15 | Report for authorization to use ground water | 50.111.00 | 1,00 | un | | |
| | <i>Risk Management</i> | | | | | |
| 16 | Risk Assessment and Mitigation Plan | 50.112.00 | 1,00 | un | | |
| 17 | Monthly Risk Management Plan Follow-Up Report | 50.114.00 | 42,00 | un | | |
| 18 | Engineering Risk Insurance (ER) | 50.116.00 | - | gl | - | |
| 19 | Technology Controls | 50.118.00 | - | gl | - | |

| | | | | | | |
|----|---|-----------|--------|--------------------|---|--|
| 20 | Social communication and interference in neighborhood | 50.120.00 | - | gl | - | |
| 21 | Supply of vehicle without driver | 50.122.00 | 264,00 | vehicle x month | | |
| 22 | Supply of vehicle with driver | 50.124.00 | 88,00 | vehicle x month | | |
| | | | | | | |
| | <u>TREE MANAGEMENT</u> | | | | | |
| | <i>Environmental Offset Commitment Sheet</i> | | | | | |
| 23 | Development of current status blueprints – CSB | 60.002.00 | 2,00 | un | | |
| 24 | Development of intended status blueprints - ISB | 60.004.00 | 2,00 | un | | |
| 25 | Environmental Offset Project – EOP | 60.006.00 | 2,00 | un | | |
| 26 | Review of intended status blueprint or Environmental Offset Project | 60.008.00 | 6,00 | un | | |
| | <i>Cutting of Plant Species</i> | | | | | |
| 27 | Cutting of specimen DBH < 10cm | 60.020.00 | 8,00 | un | | |
| 28 | Cutting of specimen 10cm <= DBH < 19cm | 60.022.00 | 6,00 | un | | |
| 29 | Cutting of specimen 19cm <= DBH < 29cm | 60.024.00 | 2,00 | un | | |
| | <i>Planting of Seedlings</i> | | | | | |
| 30 | Planting of seedlings DBH 3.0cm | 60.040.00 | 10,00 | un | | |
| 31 | Planting of seedlings DBH 5.0cm | 60.042.00 | 370,00 | un | | |
| 32 | Planting of seedlings DBH 7.0cm | 60.044.00 | 42,00 | un | | |
| | <i>Transplant of Plant Species</i> | | | | | |
| 33 | Transplant of plant species DBH < 15cm – distance above 200m | 60.060.00 | 2,00 | un | | |
| 34 | Transplant of plant species 15cm <= DBH <30cm – distance above 200m | 60.062.00 | 2,00 | un | | |
| | <i>Maintenance of Planted Seedlings</i> | | | | | |
| 35 | Seedling maintained healthy | 60.080.00 | 390,00 | un | | |
| | <i>Maintenance of Transplanted or Preserved Species</i> | | | | | |
| 36 | Species maintained healthy | 60.082.00 | 4,00 | un | | |
| | <i>Photographic Reports</i> | | | | | |
| 37 | Photographic report of existing vegetation | 60.100.00 | 1,00 | un | | |
| 38 | Photographic report registering cutting process | 60.102.00 | 2,00 | un | | |

| | | | | | | |
|----|--|------------|----------|------|--|--|
| 39 | Photographic report registering planting process | 60.104.00 | 2,00 | un | | |
| 40 | Photographic report registering status of seedlings | 60.106.00 | 6,00 | un | | |
| 41 | Photographic report registering transplant process | 60.108.00 | 2,00 | un | | |
| 42 | Photographic report registering status of species | 60.110.00 | 4,00 | un | | |
| | | | | | | |
| | <u>TREATMENT AND MONITORING OF CONTAMINATED AREAS</u> | | | | | |
| | <i>Sampling Plan</i> | | | | | |
| 43 | Investigative surveys for installation of monitoring shafts (manual auger 4" in diameter) | 100.002.00 | 100,00 | m | | |
| 44 | Investigative surveys for installation of deep monitoring (mechanized) | 100.006.00 | 1.865,50 | m | | |
| 45 | Monitoring shaft 2" finished | 100.008.00 | 1.965,50 | m | | |
| | <i>Hydrological Characterization</i> | | | | | |
| 46 | <i>Slug Test</i> | 100.010.00 | 10,00 | test | | |
| | <i>Sample Collection</i> | | | | | |
| 47 | Linear soil sample | 100.012.00 | 350,00 | test | | |
| 48 | Undeformed soil sample | 100.014.00 | 10,00 | test | | |
| 49 | Underground water sample by low flow and filtering | 100.016.00 | 1.683,00 | test | | |
| 50 | Measurement of physical-chemical parameters in ground water (temperature, pH, electrical conductivity, oxidation reduction potential, dissolved oxygen, and turbidity) | 100.018.00 | 1.683,00 | test | | |
| | <i>Physical-Chemical Analysis</i> | | | | | |
| 51 | BTXE analysis | 100.020.00 | 2.370,00 | test | | |
| 52 | BTXE rush analysis | 100.020.01 | 160,00 | test | | |
| 53 | PAH analysis | 100.022.00 | 2.370,00 | test | | |
| 54 | PAH rush analysis | 100.022.01 | 160,00 | test | | |
| 55 | TPH analysis | 100.024.00 | 79,00 | test | | |
| 56 | TPH rush analysis | 100.024.01 | 10,00 | test | | |
| 57 | VOC analysis | 100.026.00 | 23,00 | test | | |
| 58 | SVOC analysis | 100.028.00 | 23,00 | test | | |
| 59 | Analysis of Organochlorine and Organophosphorous Pesticides | 100.030.00 | 25,00 | test | | |
| 60 | Metal analysis | 100.032.00 | 602,00 | test | | |
| 61 | Metal rush analysis | 100.032.01 | 60,00 | test | | |
| 62 | PCB analysis | 100.034.00 | 25,00 | test | | |

| | | | | | | |
|----|---|------------|--------------|----------------|--|--|
| 63 | Air collection and sample and BTXE analysis | 100.036.00 | 12,00 | sample | | |
| 64 | Air collection and sample and PAH analysis | 100.038.00 | 12,00 | sample | | |
| 65 | Effective porosity | 100.044.00 | 10,00 | test | | |
| 66 | Total porosity | 100.046.00 | 10,00 | test | | |
| 67 | Natural humidity | 100.048.00 | 10,00 | test | | |
| 68 | Apparent soil density | 100.050.00 | 10,00 | test | | |
| 69 | Organic carbon fraction of soil | 100.052.00 | 10,00 | test | | |
| 70 | Soil pH | 100.054.00 | 10,00 | test | | |
| 71 | Soil permeability | 100.056.00 | 10,00 | test | | |
| 72 | Classification and characterization of solid waste (NBR 10004 - 10007) | 100.058.00 | 128,00 | test | | |
| 73 | Rush classification and characterization of solid waste (NBR 10004 - 10007) | 100.058.01 | 25,00 | test | | |
| 74 | Effluent analysis – article 18, State Decree 8,468/76, CONAMA 357/05 and CONAMA 397/08, CONAMA 430/11 | 100.060.00 | 266,00 | test | | |
| | General Services | | | | | |
| 75 | Removal and disposal of buried oil deposit | 100.064.00 | 4,00 | m ³ | | |
| 76 | Removal and disposal of fuel tank (NBR 14973) | 100.066.00 | 3,00 | un | | |
| | Reports | | | | | |
| 77 | Detailed investigation report | 100.072.00 | 3,00 | un | | |
| 78 | Human health risk assessment report | 100.074.00 | 3,00 | un | | |
| 79 | Closing monitoring report | 100.078.00 | 12,00 | un | | |
| 80 | Report on complementary environmental studies | 100.080.00 | 3,00 | un | | |
| 81 | Remediation project for contaminated area | 100.082.00 | 3,00 | un | | |
| 82 | Removal and disposal of soil - Class IIA | 100.083.00 | 799,20 | t | | |
| | Remediation | | | | | |
| 83 | Removal and disposal of contaminated soil – Class I – co-processing | 100.084.00 | 197,37 | t | | |
| 84 | Removal and disposal of contaminated soil – Class I – incineration | 100.086.00 | 50,00 | t | | |
| 85 | Removal and disposal of contaminated soil – Class I thermal desorption | 100.088.00 | 33.808,67 | t | | |
| 86 | Transport of contaminated soil for final disposal - Class I | 100.090.00 | 1.742.762,00 | t x km | | |

| | | | | | | |
|---|---|------------|------------|----------------|--|--|
| 87 | Field measurements of methane concentration and explosiveness (25 measurements per day) | 100.091.00 | 36,00 | month | | |
| 88 | Mobilization of ground water treatment system | 100.104.00 | 4,00 | un | | |
| 89 | Operation of pumped ground water treatment system | 100.106.00 | 118,00 | un x month | | |
| 90 | Mobilization of effluent treatment system | 100.107.00 | 6,00 | set | | |
| 91 | Operation of effluent treatment system | 100.107.01 | 102,00 | un x month | | |
| 92 | Remediation System Follow-Up Report | 100.151.00 | 9,00 | un | | |
| 93 | Supply and application of oxidant remediation product | 100.157.00 | 523.200,00 | l | | |
| | | | | | | |
| | <u>ARCHEOLOGY</u> | | | | | |
| 94 | Shaft test – 1 m ² | 100.108.00 | 5,00 | m | | |
| 95 | Shaft test – 0.25 m ² | 100.110.00 | 20,00 | m | | |
| 96 | Hole dug with auger | 100.112.00 | 1.000,00 | m | | |
| 97 | General surface excavation | 100.114.00 | 10,00 | m ³ | | |
| 98 | Luminescence dating | 100.122.00 | 1,00 | test | | |
| 99 | Cleaning, numbering, and cataloguing of archeological and bone material | 100.126.00 | 500,00 | part | | |
| 100 | Analysis of archeological material | 100.128.00 | 500,00 | part | | |
| 101 | Analysis of wildlife | 100.130.00 | 100,00 | part | | |
| 102 | Archeological Prospecting and Rescue Program | 100.135.00 | 1,00 | un | | |
| 103 | Final Archeological Prospecting and Rescue Program Report | 100.136.00 | 1,00 | un | | |
| 104 | Final Archeological Rescue Report | 100.138.00 | 1,00 | un | | |
| 105 | Archeological Monitoring Report | 100.140.00 | 1,00 | un | | |
| NOTE: Identification BLOCK 3 - GENERAL SERVICES, BUILDINGS FOR CONSTRUCTION SITE, OPERATION, MAINTENANCE, CLEANING AND SECURITY OF THE CONSTRUCTION SITE, BASIC NETWORKS, ENVIRONMENTAL MANAGEMENT, RISK MANAGEMENT, TREE MANAGEMENT, TREATMENT OF CONTAMINATED AREAS AND ARCHEOLOGY | | | | | | |
| TOTAL PRICE | | | | | | |

Technical Proposal

The requirements for the Technical Proposal are stated on section 3 - 2.1-
Assessment of adequacy of Technical Proposal with Requirements

Form EQU: Equipment

The Bidder shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

| | | |
|-----------------------|--|------------------------|
| Item of equipment | | |
| Equipment information | Name of manufacturer | Model and power rating |
| | Capacity | Year of manufacture |
| Current status | Current location | |
| | Details of current commitments | |
| Source | Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured | |

Omit the following information for equipment owned by the Bidder.

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

Personnel

Form PER-1: Proposed Personnel

Bidders should provide the names of suitably qualified personnel to meet the specified requirements stated in Section III. The data on their experience should be supplied using the Form below for each candidate.

| | |
|-----------|---------------------------|
| 1. | Title of position* |
| | Name |
| 2. | Title of position* |
| | Name |
| 3. | Title of position* |
| | Name |
| 4. | Title of position* |
| | Name |

*As listed in Section III.

Form PER-2: Resume of Proposed Personnel

| |
|-----------------------|
| Name of Bidder |
|-----------------------|

| | | | | | | | |
|------------------------------------|---|--|--|------------------------------------|---------------|------------------|------------------------------------|
| Position | | | | | | | |
| Personnel information | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 5px;">Name</td> <td style="padding: 5px;">Date of birth</td> </tr> <tr> <td colspan="2" style="padding: 5px;">Professional qualifications</td> </tr> </table> | Name | Date of birth | Professional qualifications | | | |
| | Name | Date of birth | | | | | |
| Professional qualifications | | | | | | | |
| Present employment | Name of employer | | | | | | |
| | Address of employer | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%; padding: 5px;">Telephone</td> <td style="padding: 5px;">Contact (manager / personnel officer)</td> </tr> <tr> <td style="padding: 5px;">Fax</td> <td style="padding: 5px;">E-mail</td> </tr> <tr> <td style="padding: 5px;">Job title</td> <td style="padding: 5px;">Years with present employer</td> </tr> </table> | Telephone | Contact (manager / personnel officer) | Fax | E-mail | Job title | Years with present employer |
| | Telephone | Contact (manager / personnel officer) | | | | | |
| | Fax | E-mail | | | | | |
| Job title | Years with present employer | | | | | | |
| | | | | | | | |
| | | | | | | | |

Summarize professional experience over the last 20 years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

| From | To | Company / Project / Position / Relevant technical and management experience |
|-------------|-----------|--|
| | | |
| | | |
| | | |
| | | |
| | | |

Bidders Qualification without prequalification

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

Form ELI -1.1

Bidder Information Form

Date: _____
 ICB No. and title: _____
 Page _____ of _____ pages

| |
|--|
| Bidder's name |
| In case of Joint Venture (JV), name of each member: |
| Bidder's actual or intended country of registration: <i>[indicate country of Constitution]</i> |
| Bidder's actual or intended year of incorporation: |
| Bidder's legal address [in country of registration]: |
| Bidder's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____ |
| 1. Attached are copies of original documents of <ul style="list-style-type: none"> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.3. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of Government-owned enterprise or institution, in accordance with ITB 4.5 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not dependent agency of the Employer |
| 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. |

Form ELI -1.2
Bidder's JV Information Form
(to be completed for each member of Bidder's JV)

Date: _____
 ICB No. and title: _____
 Page _____ of _____ pages

| |
|--|
| Bidder's JV name: |
| JV member's name: |
| JV member's country of registration: |
| JV member's year of constitution: |
| JV member's legal address in country of constitution: |
| JV member's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____ |
| 1. Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.3. <input type="checkbox"/> In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status, in accordance with ITB 4.5. |
| 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. |

Form CON – 2

Historical Contract Non-Performance, Pending Litigation and Litigation History

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB No. and title: _____

Page _____ of _____ pages

| Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria | | | |
|---|---------------------------------------|---|--|
| <input type="checkbox"/> Contract non-performance did not occur since 1 st January <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.1. | | | |
| <input type="checkbox"/> Contract(s) not performed since 1 st January <i>[insert year]</i> specified in Section III, Evaluation and Qualification Criteria, requirement 2.1 | | | |
| Year | Non-performed portion of contract | Contract Identification | Total Contract Amount (current value, currency, exchange rate and US\$ equivalent) |
| <i>[insert year]</i> | <i>[insert amount and percentage]</i> | Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for non performance: <i>[indicate main reason(s)]</i> | <i>[insert amount]</i> |
| Pending Litigation, in accordance with Section III, Qualification Criteria and Requirements | | | |
| <input type="checkbox"/> No pending litigation in accordance with Section III, Qualification Criteria and Requirements, Sub-Factor 2.3. | | | |
| <input type="checkbox"/> Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below. | | | |

| Year of dispute | Amount in dispute (currency) | Contract Identification | Total Contract Amount (currency), USD Equivalent (exchange rate) |
|--|---|---|---|
| | | Contract Identification: _____ Name of Employer: _____ Address of Employer: _____ Matter in dispute: _____ Party who initiated the dispute: _____ Status of dispute: _____ | |
| <input type="checkbox"/> No pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3. <input type="checkbox"/> Pending litigation in accordance with Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3 as indicated below. | | | |
| Year of award | Outcome as percentage of Net Worth | Contract Identification | Total Contract Amount (currency), USD Equivalent (exchange rate) |
| | | Contract Identification: Name of Employer: Address of Employer: Matter in dispute: Party who initiated the dispute: Status of dispute: | |

Form FIN – 3.1:

Financial Situation and Performance

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB No. and title: _____

Page _____ of _____ pages

1. Financial data

| Type of Financial information in (currency) | Historic information for previous _____ years, _____ (amount in currency, currency, exchange rate*, USD equivalent) | | | | |
|--|--|--------|--------|--------|--------|
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Statement of Financial Position (Information from Balance Sheet) | | | | | |
| Total Assets (TA) | | | | | |
| Total Liabilities (TL) | | | | | |
| Net Worth (NW) | | | | | |
| Current Assets (CA) | | | | | |
| Current Liabilities (CL) | | | | | |
| Information from Income Statement | | | | | |
| Total Revenue (TR) | | | | | |
| Profits Before Taxes (PBT) | | | | | |

* The conversion shall be made considering the exchange rate prevailing on the date of closing of each fiscal year.

2. Financial documents

The Bidder and its parties shall provide copies of financial statements for *five(5)* years pursuant Section III, Evaluation and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member , and not an affiliated entity (such as parent company or group member).
 - (b) be independently audited or certified in accordance with local legislation.
 - (c) be complete, including all notes to the financial statements.
 - (d) correspond to accounting periods already completed and audited.
- Attached are copies of financial statements⁹ (balance sheets, including all related notes, and income statements) for the *five (5)* years required above; and complying with the requirements

⁹ If the most recent set of financial statements is for a period earlier than 12 months from the date of application, the reason for this should be justified.

Form FIN – 3.2:

Average Annual Construction Turnover

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB No. and title: _____

Page _____ of _____ pages

| | | Annual turnover data (construction only) | |
|--|--|---|-----------------------|
| Year | Amount Currency | Exchange rate | USD equivalent |
| <i>[indicate year]</i> | <i>[insert amount and indicate currency]</i> | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Average Annual Construction Turnover * | | | |

* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

Form FIN – 3.3:

Financial Resources

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

| Financial Resources | | |
|----------------------------|----------------------------|---------------------------------|
| No. | Source of financing | Amount (US\$ equivalent) |
| 1 | | |
| 2 | | |
| 3 | | |
| | | |

Form FIN – 3.4:

Current Contract Commitments / Works in Progress

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

| Current Contract Commitments | | | | | |
|------------------------------|------------------|--|---|---------------------------------|--|
| No. | Name of Contract | Employer's Contact Address, Tel, Fax | Value of Outstanding Work [Current US\$ Equivalent] | Estimated Completion Date | Average Monthly Invoicing Over Last Six Months [US\$/month] |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| | | | | | |

Form EXP - 4.1 General Construction Experience

Bidder's Name: _____
 Date: _____
 JV Member's Name _____
 ICB No. and title: _____
 Page _____ of _____ pages

| Starting Year | Ending Year | Contract Identification | Role of Bidder |
|---------------|-------------|---|----------------|
| | | Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____ | |
| | | Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____ | |
| | | Contract name: _____ Brief Description of the Works performed by the Bidder: _____ Amount of contract: _____ Name of Employer: _____ Address: _____ | |

Form EXP - 4.2(a)

Specific Construction and Contract Management Experience

Bidder's Name: _____

Date: _____

JV Member's Name _____

ICB No. and title: _____

Page _____ of _____ pages

| Similar Contract No. | Information | | | |
|---|---|---|--|--|
| Contract Identification | | | | |
| Award date | | | | |
| Completion date | | | | |
| Role in Contract | Prime Contractor <input type="checkbox"/> | Member in JV <input type="checkbox"/> | Management Contractor <input type="checkbox"/> | Sub- contractor <input type="checkbox"/> |
| Total Contract Amount | | | US\$ | |
| If member in a JV or sub-contractor, specify participation in total Contract amount | | | | |
| Employer's Name: | | | | |
| Address: | | | | |
| Telephone/fax number | | | | |
| E-mail: | | | | |

Form EXP - 4.2(a) (cont.)
Specific Construction and Contract Management
Experience (cont.)

| Similar Contract No. | Information |
|--|--------------------|
| Description of the similarity in accordance with Sub-Factor 4.2(a) of Section III: | |
| 1. Amount | |
| 2. Physical size of required works items | |
| 3. Complexity | |
| 4. Methods/Technology | |
| 5. Construction rate for key activities | |
| 6. Other Characteristics | |

Form EXP - 4.2(b)

Construction Experience in Key Activities

Bidder's Name: _____

Date: _____

Bidder's JV Member Name: _____

Sub-contractor's Name¹⁰ (as per ITB 34.2 and 34.3): _____

ICB No. and title: _____

Page _____ of _____ pages

All Sub-contractors for key activities must complete the information in this form as per ITB 34.2 and 34.3 and Section III, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: _____

| Information | | | | |
|--|---|---|--|--|
| Contract Identification | | | | |
| Award date | | | | |
| Completion date | | | | |
| Role in Contract | Prime Contractor <input type="checkbox"/> | Member in JV <input type="checkbox"/> | Management Contractor <input type="checkbox"/> | Sub- contractor <input type="checkbox"/> |
| Total Contract Amount | | | US\$ | |
| Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year | Total quantity in the contract (i) | Percentage participation (ii) | | Actual Quantity Performed (i) x (ii) |
| Year 1 | | | | |
| Year 2 | | | | |
| Year 3 | | | | |
| Year 4 | | | | |

¹⁰ If applicable

| | Information |
|----------------------|--------------------|
| Employer's Name: | |
| Address: | |
| Telephone/fax number | |
| E-mail: | |

2. Activity No. Two

3.

| | Information |
|--|--------------------|
| Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III: | |
| | |
| | |
| | |
| | |
| | |

Form of Bid Security

(Demand Guarantee)

Beneficiary: _____

Invitation for Bids No: _____

Date: _____

BID GUARANTEE No.: _____

Guarantor: _____

We have been informed that _____ (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. _____ ("the IFB").

Furthermore, we understand that, according to the Beneficiary's conditions, bids must be supported by a bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid during the period of bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such contract agreement; or (b) if the Applicant is not the successful bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

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

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[signature(s)]

Section V. Eligible Countries

Section V. Eligible Countries

Eligibility for the Provision of Goods, Works and Non Consulting Services in Bank-Financed Procurement

1. In reference to ITB 4.7 and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this bidding process:

Under ITB 4.7(a) and 5.1: *ALL COUNTRIES THAT DO NOT HAVE DIPLOMATIC RELATIONS WITH BRAZIL.*

Under ITB 4.7(b) and 5.1: *ALL COUNTRIES BANNED UNDER UN SECURITY COUNCIL CHAPTER VII.*

Section VI. Bank Policy - Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011.

“Fraud and Corruption:

1.16 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.¹¹ In pursuance of this policy, the Bank:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) “corrupt practice” is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;¹²
 - (ii) “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;¹³
 - (iii) “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;¹⁴
 - (iv) “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;¹⁵
 - (v) "obstructive practice" is

¹¹ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

¹² For the purpose of this sub-paragraph, “*another party*” refers to a public official acting in relation to the procurement process or contract execution. In this context, “*public official*” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

¹³ For the purpose of this sub-paragraph, “*party*” refers to a public official; the terms “*benefit*” and “*obligation*” relate to the procurement process or contract execution; and the “*act or omission*” is intended to influence the procurement process or contract execution.

¹⁴ For the purpose of this sub-paragraph, “*parties*” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

¹⁵ For the purpose of this sub-paragraph, “*party*” refers to a participant in the procurement process or contract execution.

- (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- (c) will declare misprocurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,¹⁶ including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated¹⁷;
- (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to

¹⁶ A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

¹⁷ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.”

PART 2 – WORKS REQUIREMENTS

Section VII. Works Requirements

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Scope of Works

The services, object of this contract, must be performed observing all the Technical documentation that is part of the contract and in compliance with what is stated in the bidding documents that preceded this agreement, comprising:

The objective of this phase is to complement the partially implemented work and to perform the extension of Vila Sonia, to meet the transport demand in the Metropolitan Region of São Paulo (MRSP) increasing the availability of the transport system and developing levels of mobility, connectivity, safety and comfort in public transport in the North, Center and West regions of MRSP.

Line 4, with a length of 12,8km, includes the stations Luz, República, Paulista, Fradique Coutinho, Faria Lima, Pinheiros and Butantã, and its ventilations and emergency exits. The Higienópolis-Mackenzie station, Oscar Freire station, Maintenance Base Cunha Gago, São Paulo-Morumbi station, Vila Sonia yard, Bus Terminal, Vila Sonia station, ventilations and Emergency Exits, tunnels are object of this contract.

After completion of the implementation of the enterprise, the extension of the Line will be 14,3km, making it easier to link the Pinheiros, Faria Lima, Paulista, República and Luz region, with a significant reduction in the travel time and in the amount of buses.

Detailment of the Services Scope

1.1. Higienópolis-Mackenzie Station;

Complementing the civil works - Piauí access (internal structure of the shaft, operational rooms);
 Complementing the finishing services - Ouro Preto access;
 Complement of the Metallic Mezzanine and finishing services of the Station Structure;
 Finishing Services - Piauí access;
 Hydraulics;
 Visual communication;
 Urbanization and Landscaping.

1.2. Oscar Freire Station

Execution of civil work, complement of the relocation of interferences of the Clínicas access;
 Complementing the civil work – Jardins access (access and technical and operational rooms);
 Complementing the finishing services - Jardins access;
 Complement of the Metallic Mezzanine and finishing services of the Station Structure;

-
- Finishing Services - Clínicas access;
Hydraulics;
Visual communication;
Urbanization and Landscaping.
- 1.3 Maintenance Base Cunha Gago
Civil Works;
Finishing Services;
Hydraulics;
Visual communication;
Urbanization and Landscaping.
- 1.4. São Paulo-Morumbi Station
Complementing the civil works (internal structure of the shaft);
Internal Structure of the VCA;
Complementing the structures of the technical rooms;
Complement of the Metallic Mezzanine and finishing services of the Station Structure;
Traffic Deviation;
North/South connections (Tunnel and VCA);
Execution of the Bus Terminal;
Execution of the finishing services - Station and North and South Access;
Hydraulics;
Visual communication;
Urbanization and Landscaping.
- 1.5. Bus Terminal – Vila Sônia
Complementing the Terminal's Structure;
Eliseu de Almeida Footbridge and Access of the Vila Sônia Bus Terminal;
Metallic Roof;
Finishing Services;
Hydraulics;
Visual communication;
Urbanization and Landscaping.
- 1.6. Vila Sônia Yard - Block A
Relocation of Frames;
Installation of sun protectors;
Finishing Services;
Hydraulics;
Visual communication;
- 1.7. Vila Sônia Yard - Block B/M
Civil Work;
Finishing Services;
Hydraulics;

-
- Visual communication;
- 1.8. Vila Sônia yard - Block F
- Civil Work;
Finishing Services;
Hydraulics;
Visual communication;
- 1.9. Vila Sônia Yard – General
Infrastructure for the Permanent Way
- 1.10. VCA
- Complementing the diaphragm wall;
Execution of internal structures;
- 1.11. VSE – Vila Sônia Ventilation and Emergency Exits
Civil Work;
Finishing Services;
Hydraulics;
Visual Communications;
Urbanization and Landscaping.
- 1.12. VSE Vila Sônia/ Vila Sônia Station Tunnel (NATM);
- 1.13. Vila Sônia Station
Execution of the civil works of the station and accesses;
Traffic Deviations;
Execution of finishing services – Station and accesses;
Hydraulics;
Visual Communication;
Urbanization and Landscaping.
- 1.14. Vila Sônia Station/VSE Edmundo Lins Tunnel (NATM);
- 1.15. VSE – Ventilation and Emergency Exit Edmundo Lins
- Civil Works;
Finishing Services;
Hydraulics;
Visual Communication;
Urbanization and Landscaping.
- 1.16. Single Tunnel – Injection Way (NATM);
- 1.17. VSE Edmundo Lins/SE David Matarasso Tunnel (NATM);

1.18. SE – Emergency Exit David Matarasso

Complementing the structures;

Finishing Services;

Hydraulics;

Visual Communication;

Urbanization and Landscaping;

1.19. SE David Matarasso/End of the Section Tunnel (NATM);

Technical Documentation

THE TECHNICAL DOCUMENTATION IS ATTACHED SEPARATELY

See files: **TECHNICAL DOCUMENTATION.pdf**
ÍNDICE – DOCS TÉCNICOS_DE.pdf
ÍNDICE DOCS TÉCNICOS_DEMAIS DOCUMENTOS.pdf
ÍNDICE DOCS TÉCNICOS_PP.pdf

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

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Section VIII. General Conditions (GC)

COMPANHIA DO METROPOLITANO DE SÃO PAULO - METRÔ

[Name of Employer]

[Name of Contract]

The General Conditions that follow are the Bank Harmonized Edition of the Conditions of Contract for Construction prepared and copyrighted by the International Federation of Consulting Engineers (*Fédération Internationale des Ingénieurs-Conseils*, or FIDIC), FIDIC 2010-All rights reserved. This publication is exclusive for the use of Bank Borrowers and their project implementing agencies as provided under the License Agreement dated March 11th, 2005, between the IBRD and FIDIC, and, consequently, no part of this publication may be reproduced, translated, adapted, stored in a retrieval system or communicated, in any form or by any means, whether mechanical, electronic, magnetic, photocopying, recording or otherwise, without prior permission in writing from FIDIC, except by the Employer identified above and only for the exclusive purpose of preparing these Standard Bidding Documents for the Contract also identified above.

General Conditions

1. General Provisions

1.1 Definitions

In the Conditions of Contract (“these Conditions”), which include Particular Conditions, Parts A and B, 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 Specification, the Drawings, the Schedules, 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 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 “Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.

1.1.1.6 “Drawings” means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.

1.1.1.7 “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 the Bill of Quantities, data, lists, and schedules of rates and/or prices.

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 “Bill of Quantities”, “Daywork Schedule” and “Schedule of Payment Currencies” mean the documents so named (if any) which are comprised in the Schedules.

1.1.1.10 “Contract Data” means the pages completed by the Employer entitled contract data which constitute Part A of the Particular Conditions.

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]

1.1.2.10 "FIDIC" means the Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers.

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 and Completion

1.1.3.1 "Base Date" means the date 28 days prior to the latest date for submission 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 in accordance with the Specification 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], which extends over 365 days except if otherwise 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 other equipment 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.

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 Specification; 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 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;
- (d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and
- (e) the word “tender” is synonymous with “bid” and “tenderer” 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 expression "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,

requests and discharges, these communications shall be:

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

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

- (e) the Particular Conditions – Part B
- (f) these General Conditions
- (g) the Specification,
- (h) the Drawings, and
- (i) the Schedules 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

The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

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 Specification, the Contractor's

Documents (if any), the Drawings 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 Delayed Drawings or Instructions

The Contractor shall give notice to the Engineer whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and the nature and amount of the delay or disruption likely to be suffered if it is late.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, 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 plus profit, 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.

However, if and to the extent that the Engineer'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.

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 licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence 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 Specification, the Drawings 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, building permit or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or to be) 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 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.

1.14 Joint and 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.

1.15 Inspections and Audit by the Bank

The Contractor shall permit the Bank and/or persons appointed by the Bank to inspect the Site and/or the Contractor's accounts and records relating to the performance of the Contract and to have such accounts and records audited by

auditors appointed by the Bank if required by the Bank.

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 Specification. 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 required to enable the Contractor to proceed without disruption 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, Licences 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, licences 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

The Employer shall submit, before the Commencement Date and thereafter within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price punctually (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment]. Before the Employer makes any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.

In addition, if the Bank has notified to the Borrower that the Bank has suspended disbursements under its loan, which finances in whole or in part the execution of the Works, the Employer shall give notice of such suspension to the Contractor with detailed particulars, including the date of such notification, with a copy to the Engineer, within 7 days of the Borrower having received the suspension notification from the Bank. If alternative funds will be available in appropriate currencies to the Employer to continue making payments to the Contractor beyond a date 60 days after the date of Bank notification of the suspension, the Employer shall provide reasonable evidence in his notice of the extent to which such

funds will be available.

- 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 Materials], 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;
- (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; and
- (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 provisions shall apply:

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

- (a) Sub-Clause 4.12: agreeing or determining an extension of time and/or additional cost.
- (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 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].

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 and additional or modified Drawings 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. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:

- (a) gives an oral instruction,
- (b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and
- (c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).

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. If the Contractor considers the intended replacement Engineer to be unsuitable, he has the right to raise objection against him by notice to the Employer, with supporting particulars, and the Employer shall give full and fair consideration to this objection.

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].

4. The Contractor

4.1 Contractor's General Obligations

The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works.

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.

All equipment, material, and services to be incorporated in or required for the Works shall have their origin in any eligible source country as defined by the Bank.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent 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..

If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall submit to the Engineer the Contractor's Documents for this part in accordance with the procedures specified in the Contract;
- (b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Engineer to add to the Drawings for co-ordination of each Party's designs;

- (c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and
- (d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Engineer the “as-built” documents and, if applicable, operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part 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 these documents and manuals have been submitted 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 bank or financial institution selected by the Contractor, and shall be in the form annexed to the Particular Conditions, as stipulated by the Employer in the Contract Data, 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;
- (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; and
- (d) each subcontract shall include provisions which would entitle the Employer to require the subcontract to be assigned to the Employer under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Employer].

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 Assignment of Benefit of Subcontract

If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Employer, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Employer for the work carried out by the Subcontractor after the assignment takes effect.

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 to 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.

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 Specification.

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 sub-paragraphs (a) and (b) above related to this e.

4.8 Safety Procedures The Contractor shall:

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

4.9 Quality Assurance

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The 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].

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 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 shall take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Tender, which shall be made available by the Contractor, but shall not be bound by the Contractor's interpretation of 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:

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

4.16 Transport of Goods

Unless otherwise stated in the Particular Conditions:

- (a) the Contractor shall give the 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.

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 transporting Goods or Contractor's Personnel off Site.

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 stated in the Specification 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 Specifications, 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 Specification. 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 Materials

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 Specification. Unless otherwise stated in the Specification:

- (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 Specification. 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 (if any), Contractor’s Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (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 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. Nominated Subcontractors

5.1 Definition of "nominated Subcontractor"

In the Contract, "nominated Subcontractor" means a Subcontractor:

- (a) who is stated in the Contract as being a nominated Subcontractor, or
- (b) whom the Engineer, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor subject to Sub-Clause 5.2 [Objection to Notification].

5.2 Objection to Nomination

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. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees in writing to indemnify the Contractor against and from the consequences of the matter:

- (a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;
- (b) the nominated Subcontractor does not accept to indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or
- (c) the nominated Subcontractor does not accept to enter into a subcontract which specifies that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:
 - (i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract;
 - (ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities, and
 - (iii) be paid only if and when the Contractor has received from the Employer payments for sums due under the Subcontract referred to under Sub-Clause 5.3 [Payment to nominated Subcontractors].

5.3 Payments to nominated Subcontractors

The Contractor shall pay to the nominated Subcontractor the amounts shown on the nominated Subcontractor's invoices approved by the Contractor which the Engineer certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

5.4 Evidence of Payments

Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

- (a) submits this reasonable evidence to the Engineer, or
- (b)
 - (i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and
 - (ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,

then the Employer may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Employer, the amount which the nominated Subcontractor was directly paid by the Employer.

6. Staff and Labour**6.1 Engagement of Staff and Labour**

Except as otherwise stated in the Specification, 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 of Employer

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 Specification, 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 Specification.

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 employees, 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 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 Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes 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 the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

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 thereof 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 Works.
- 6.20 Prohibition of Forced or Compulsory Labour** The Contractor shall not employ forced labour, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements.
- 6.21 Prohibition of Harmful Child Labour** The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, 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. 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 Workers' Organisations** In countries where the relevant labour laws recognise workers' rights to form and to join workers' organisations of their choosing without interference and to bargain collectively, the Contractor shall comply with such laws. Where the relevant labour laws substantially restrict workers' organisations, 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' organisations 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 organisations and bargain collectively. The Contractor shall engage with such workers' representatives. Workers' organisations 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 non-discrimination 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 consent prior to using the Materials in or for the Works:

- (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.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the 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.

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 or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject the Plant, Materials 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 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 subparagraph (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 as otherwise provided 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 Specification, 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 Works

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

- (a) signature of the Contract Agreement by both Parties, and if required, approval of the Contract by relevant authorities of 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
- (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 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 Time for Completion

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

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

8.3 Programme

The Contractor shall submit a detailed time programme to the 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 (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,
- (b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- (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]) or other substantial change in the quantity of an item of work included in the Contract,
- (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-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].

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.

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 any Tests on Completion, 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 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 within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

The 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 on Completion

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

The 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
Remediating
Defects**

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

- (a) any design for which the Contractor is responsible,
- (b) Plant, Materials or workmanship not being in accordance with the Contract, or
- (c) 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. 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 such right of access to the Works as is reasonably required in order to comply with this Clause, 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 receipt by the Contractor 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. Measurement and Evaluation

12.1 Works to be Measured

The Works shall be measured, and valued for payment, in accordance with this Clause. The Contractor shall show in each application under Sub-Clauses 14.3 [Application for Interim Payment Certificates], 14.10 [Statement on Completion] and 14.11 [Application for Final Payment Certificate] the quantities and other particulars detailing the amounts which he considers to be entitled under the Contract.

Whenever the Engineer requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:

- (a) promptly either attend or send another qualified representative to assist the Engineer in making the measurement, and
- (b) supply any particulars requested by the Engineer.

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

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

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

12.2 Method of Measurement

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

- (a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and
- (b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.

12.3 Evaluation

Except as otherwise stated in the Contract, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the Contract Price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above Sub-Clauses 12.1 and 12.2 and the appropriate rate or price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the Contract or, if there is no such item, specified for similar work.

Any item of work included in the Bill of Quantities for which no rate or price was specified shall be considered as included in other rates and prices in the Bill of Quantities and will not be paid for separately.

However, a new rate or price shall be appropriate for an item of work if:

- (a)
 - (i) the measured quantity of the item is changed by more than 25% from the quantity of this item in the Bill of Quantities or other Schedule,
 - (ii) this change in quantity multiplied by such specified rate for this item exceeds 0.25% of the Accepted Contract Amount,
 - (iii) this change in quantity directly changes the Cost per unit quantity of this item by more than 1%, and
 - (iv) this item is not specified in the Contract as a “fixed rate item”;

or

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

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

Until such time as an appropriate rate or price is agreed or determined, the Engineer shall determine a provisional rate or price for the purposes of Interim Payment Certificates as soon as the concerned work commences.

12.4 Omissions

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

- (a) the Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;
- (b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and
- (c) this cost is not deemed to be included in the evaluation of any substituted work;

then the Contractor shall give notice to the Engineer accordingly, with supporting particulars. Upon receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

13. Variations and Adjustments

13.1 Right to Vary

Variations may be initiated by the 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, or (ii) such Variation triggers a substantial change in the sequence or progress of the Works. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction.

Each Variation may include:

- (a) changes to the quantities of any item of work included in the Contract (however, such changes do not necessarily constitute a Variation),
- (b) changes to the quality and other characteristics of any item of work,
- (c) changes to the levels, positions and/or dimensions of any part of the Works,
- (d) omission of any work unless it is to be carried out by others,
- (e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or
- (f) changes to the sequence or timing of the execution of the Works.

The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Engineer instructs or approves a Variation.

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].

If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

- (a) the Contractor shall design this part,
- (b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and
- (c) if this change results in a reduction in the contract value of this part, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall be half (50%) of the difference between the following

amounts:

- (i) such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost],and
- (ii) the reduction (if any) in the value to the Employer of the varied works, taking account of any reductions in quality, anticipated life or operational efficiencies.

However, if amount (i) is less than amount (ii), there shall not be a fee.

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 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 evaluation of the Variation.

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.

Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Engineer instructs or approves otherwise in accordance with this Clause.

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 Clause 5 [Nominated Subcontractors]) or 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.

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 adjustment data for local and foreign currencies 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:

$P_n = a + b L_n / L_o + c E_n / E_o + d M_n / M_o + \dots$ where:

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

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

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

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

“ L_o ”, “ E_o ”, “ M_o ”, ... 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 favourable 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 agreed or determined under Sub-Clause 12.3 [Evaluation] 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 except as stated in Sub-Clause 13.7 [Adjustments for Changes in

Legislation];

- (c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and correct quantities:
 - (i) of the Works which the Contractor is required to execute, or
 - (ii) for the purposes of Clause 12 [Measurement and Evaluation]; and
- (d) the Contractor shall submit to the Engineer, within 28 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules. The Engineer may take account of the breakdown when preparing Payment Certificates, but shall not be bound by it.

Notwithstanding the provisions of subparagraph (b), 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-free loan for mobilisation and cash flow support, 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 advance payment or its 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] and (ii) a guarantee in amounts and currencies equal to the advance payment. This guarantee shall be issued by a reputable bank or financial institution selected by the Contractor and shall be in the form annexed to the Particular Conditions 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 shall 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 percent (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 percent (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], except for Sub-Clause 15.5 [Employer's Entitlement to Termination for Convenience], 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 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 report on the progress during

this month 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 for the advance payment and (if more than one instalment) and to be deducted for its 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:

- (a) the instalments quoted in this 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 or more than that on which this 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 Schedules 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 (80%) 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, deliver to the Employer and to the Contractor 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 any thing 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.

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; or, at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended, 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; and

- (c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate; or, at a time when the Bank's loan or credit (from which part of the payments to the Contractor is being made) is suspended, 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 Particular Conditions, 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 available, 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, 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 or part of the Works, a proportion of the Retention Money shall be certified and paid. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section or part, by the estimated final Contract Price.

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, a proportion 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. This proportion shall be half (50%) of the proportion calculated by dividing the estimated contract value of the Section by the estimated final Contract Price.

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

When calculating these proportions, no account shall be taken of any adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost].

Unless otherwise stated in the Particular Conditions, when the Taking-Over Certificate has been issued for the Works 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 issued by a reputable bank or financial institution selected by the Contractor, 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 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 outstanding balance of this total, in which event the discharge shall 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 named in the Schedule of Payment Currencies. If more than one currency is so named, payments shall be made as follows:

- (a) if the Accepted Contract Amount was expressed in Local Currency only:
 - (i) the proportions or amounts of the Local and Foreign Currencies, and the fixed rates of exchange to be used for calculating the payments, shall be as stated in the Schedule of Payment Currencies, except as otherwise agreed by both Parties;
 - (ii) payments and deductions under Sub-Clause 13.5 [Provisional Sums] and Sub-Clause 13.7 [Adjustments for Changes in Legislation] shall be made in the applicable currencies and proportions; and
 - (iii) other payments and deductions under sub-paragraphs (a) to (d) of Sub-Clause 14.3 [Application for Interim Payment Certificates] shall be made in the currencies and proportions specified in sub-paragraph (a)(i) above;
- (b) payment of the damages specified in the Contract Data, shall be made in the currencies and proportions specified in the Schedule of Payment Currencies;
- (c) 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;
- (d) 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
- (e) if no rates of exchange are stated in the Schedule of Payment Currencies, they 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 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. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor under Clause 16.2 [Termination by Contractor].

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 16.4 [Payment on Termination].

15.6 Corrupt or Fraudulent Practices

If the Employer determines, based on reasonable evidence, 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 Contract and expel him from the Site, and the provisions of Clause 15 shall apply as if such termination had been made under Sub-Clause 15.2 [Termination by Employer].

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

For the purposes of this Sub-Clause:

- (i) “corrupt practice” is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;¹⁸
- (ii) “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;¹⁹
- (iii) “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;²⁰
- (iv) “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;²¹
- (v) “obstructive practice” is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under Sub-Clause 1.15 [Inspections and Audits by the Bank].

¹⁸ “Another party” refers to a public official acting in relation to the procurement process or contract execution]. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

¹⁹ “Party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

²⁰ “Parties” refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

²¹ “Party” refers to a participant in the procurement process or contract execution.

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 sub-paragraph (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 under Sub-Clause 16.1 above, or (ii) terminate 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 for Convenience], 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 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 Contractor's design (if any), the 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 Contractor's design (if any), 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 sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].

17.2 Contractor's Care of the Works

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

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

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

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

17.3 Employer's Risks

The risks referred to in Sub-Clause 17.4 [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 radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,
- (e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,
- (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,
- (g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, 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 preventive 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 sub-paragraphs (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 Contract, 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 manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

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 Materials], 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
Accomoda-
tion/Facilities**

The Contractor shall take full responsibility for the care of the Employer provided accommodation and facilities, if any, as detailed in the Specification, 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 sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.

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

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 to the Party actually

- bearing the costs 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 sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Employer's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Contract Data (if an amount is not so stated, this sub-paragraph (d) shall not apply), and
 - (e) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),
 - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,
 - (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 radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- (v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

19.2 Notice of Force Majeure

If a Party is or will be prevented from performing 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 his 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 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 Subcontractor

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

19.6 Optional Termination, Payment and Release

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

Upon such termination, the 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) other Cost or liabilities which in the circumstances were reasonably and necessarily 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

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 8.4 [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 has 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. Each Party shall be responsible for paying one-half of the remuneration of the appointing entity or official.

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.

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,
 - (i) for contracts financed by all participating Banks except under sub-paragraph (a) (2) below: international arbitration (1) with proceedings administered by the arbitration institution designated in the Contract Data, and conducted under the rules of arbitration of such institution; or, if so specified in the Contract Data, (2) international arbitration in accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL); or (3) if neither an arbitration institution nor UNCITRAL arbitration rules are specified in the Contract Data, 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 the neutral location specified in the Contract Data; 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 a final and binding DB decision, 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

A 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 Board 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 Board Agreement, which incorporates this Appendix. In the Dispute Board 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 Board 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 Engineer, nor any financial interest in the Contract except for payment under the Dispute Board 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 Board Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Board 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 Board 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 Board Agreement;
- (h) ensure his/her availability for all site visits and hearings as are necessary;
- (i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
- (j) 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
- (k) 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 Board Agreement. 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;

Or

- (b) 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 is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a dispute to the DB under Sub-Clause 20.4 of the Conditions of Contract, which will require the Member to make a site visit and attend a hearing, the Employer or the Contractor shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

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 sub-paragraphs (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 which shall be considered as payment in full for:

- (i) 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 retainer and daily fees 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 Members (if any), for proceedings 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) - (k) 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.

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.

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, 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.

Section IX. Particular Conditions (PC)

The following Particular Conditions shall supplement the GC. Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

Part A - Contract Data

| Conditions | Sub-Clause | Data |
|------------------------------------|------------------|--|
| Employer's name and address | 1.1.2.2 & 1.3 | COMPANHIA DO METROPOLITANO DE SÃO PAULO – METRÔ Rua Augusta, 1626 – CEP 01304-902 - São Paulo – SP - Brasil |
| Engineer's name and address | 1.1.2.4 & 1.3 | To be set at the moment of the issue of the contract agreement. |
| Bank's name | 1.1.2.11 | THE WORLD BANK |
| Borrower's name | 1.1.2.12 | THE GOVERNMENT OF THE STATE OF SÃO PAULO |
| Time for Completion | 1.1.3.3 | <p>1. The term of this Agreement is 47 (forty-seven) months from the date of signature, and its effectiveness is conditioned to the publication in the Official Gazette of the State of São Paulo, according to the law.</p> <p>2. The services object of this Agreement have a period of execution of 42 (forty-two) months counted from the issuance of the Service Order (OS), for the works as follows:</p> <p>2.1 The deadline for issuing the first Service Order is thirty (30) days counted from the date of signature of this Agreement.</p> <p>3. The building site must be disabled within thirty (30) days from the communication of completion of civil works.</p> <p>4. The inspection of the works shall be carried out by the EMPLOYER, CMCP-Commission for Monitoring and Concessions and permissions and the CONCESSIONAIRE Via Quatro, within fifteen (15) days from the date on which the CONTRACTOR communicates in</p> |

| Conditions | Sub-Clause | Data |
|--|------------|--|
| | | <p>writing the completion of works and services, and provided that they are approved without hindering pending matters.</p> <p>5. Within fifteen (15) days from the completion of the final civil work inspection for the issuance of the Provisional Acceptance Statement (TAP).</p> <p>6. Within ninety (90) days from the issuance of the Provisional Acceptance Statement (TAP), it must be issued the Final Acceptance Statement (TAD).</p> <p>7. The CONTRACTOR shall deliver to the EMPLOYER, within fifteen (15) days after the issuance of the first Service Order, the Registration in the Specific INSS Register - CEI for the services object of this contract.</p> <p>8. The CONTRACTOR shall submit the Debit Clearance Certificate from the INSS - CND, concerning the civil works to the EMPLOYER, within thirty (30) days from the date of completion of the work/ services.</p> <p>9. The object of this contract will be performed in obedience to the time periods specified in the Work Schedule contained in this contract, to be elaborated according to the Planning Contract Specifications, NOR-09-202, in which the time limits are always counted in consecutive days respecting interim periods (Milestones/ Schedule - Metro), counted from the issuance of the Service Order, attached to this Agreement.</p> <p>9.1 The CONTRACTOR shall submit within twenty eight (28) days counted from the contract signature its detailed Work Schedule, for review and approval of the EMPLOYER.</p> |
| Defects Notification Period | 1.1.3.7 | 365 days. |
| Electronic transmission systems | 1.3 | Not Applicable |

| Conditions | Sub-Clause | Data |
|--|-------------------|---|
| Governing Law | 1.4 | The law of Brazil |
| Ruling language | 1.4 | The language of the proposal |
| Language for communications | 1.4 | Either English or Portuguese |
| Time for the Parties entering into a Contract Agreement | 1.6 | 28 days |
| Inspections and Audit by the Bank | 1.15 | This clause shall be amended as follows: The Contractor shall permit, and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit, the Bank and/or persons appointed by the Bank to inspect the Site and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Contractor's attention is drawn to Sub-Clause 15.6 [Corrupt or Fraudulent Practices] which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 1.15 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures). |
| Time for access to the Site | 2.1 | No later than the Commencement Day, except for the following parts (if applicable, with detailed description of parts concerned: 30 days after Commencement Date |
| Inclusion of New Subclause Employer's Obligations and Responsibilities | 2.6 | 2.6.1 The EMPLOYER will guarantee that the CONTRACTOR's personnel have access to the site and to the necessary information for the performance of the services. During the performance of the activities, it may occur interfaces with the company responsible for the operation of Line 4 – Yellow, these interfaces shall be deal in accordance with the document |

| Conditions | Sub-Clause | Data |
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| | | <p>“GUIDELINES FOR MUTUAL RELATIONSHIP AND INTERFACES FOR THE IMPLEMENTATION OF PHASE II OF LINE 4 - YELLOW”. – attached</p> <p>2.6.1.1 Considering the need to perform Supplementary Services of the Metallic Mezzanine in operational area, it will be made available, when necessary and with the consent of the EMPLOYER, the release of PAESE – Supporting Plan Between Companies in Emergency Situations.</p> <p>2.6.2 The EMPLOYER shall take out and maintain at its own cost the Civil Liability Insurance for Civil Works, to cover personal and/or property damage that may unintentionally be caused to third parties, public service concessionaires, individuals and/or property bordering the works, as well as in cases that may require compensatory sanctions, given the subject of this contract.</p> <p>2.6.3 The EMPLOYER will make the compensation of the Engineering Risks Insurance through the presentation of the Debit Note, accompanied by the corresponding copy of the policy and original proof of the insurance premium payment.</p> <p>2.6.4 The EMPLOYER will provide a system for follow up and control of the Geotechnical Instrumentation for Settlement control.</p> <p>2.6.5 TAX BREAKS</p> <p>2.6.5.1 In case the EMPLOYER obtains tax benefits or exemptions from the government authorities, the prices will be adjusted based on the concessional acts, allowing the CONTRACTOR to transfer the benefits expressly granted to the EMPLOYER according to its rules and timing of use, in so far proven to be used.</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>2.6.5.2 The application of the tax breaks is conditioned to the previous verification, by the EMPLOYER, of the respective concessions and compliance with all terms and conditions stipulated in the concessional acts of the tax authorities.</p> <p>2.6.5.3 If, for any reason, the tax breaks are repealed with retroactive effect, wholly or partly, by the authorities, the EMPLOYER will reimburse the CONTRACTOR of all the reductions granted on that basis, as well as all the taxes and other required additions, due to the repeal.</p> |
| Engineer's Duties and Authority | 3.1(b)(ii) | <p>Variations resulting in an increase of the Accepted Contract Amount in excess of <u>ANY</u> % shall require approval of the Employer. <u>It will only be allowed additions or reductions in the maximum amount of 25% of the updated initial price of the contract, in accordance with article 65, 1st paragraph of the Federal law 8.666/93.</u></p> |
| <p>Contractor's General Obligations</p> <p>Inclusion of Subclauses</p> | 4.1 | <p>The CONTRACTOR, in addition to other charges under this contract and the technical documents that are part of it, is obliged to comply with the provisions of this clause, namely:</p> <p>4.1.1 GENERAL OBLIGATIONS</p> <p>4.1.1.1 The CONTRACTOR is obliged, throughout the execution of the Agreement, in compatibility with the obligations assumed by it, to keep all the qualification conditions required in the bidding process that preceded this Agreement, immediately communicating any supervening fact or circumstance that change these conditions.</p> <p>4.1.1.2 The CONTRACTOR shall keep its address updated to the EMPLOYER, and must promptly report any change occurring during the execution of the Contract.</p> <p>4.1.1.3 The CONTRACTOR must comply with all information security requirements,</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>complying with and respecting the preservation, confidentiality, integrity, copyright rights, legal aspects, the different types of access to systems and data, being subject, in not doing so, to the sanctions provided in this contract agreement, regardless of being subject to appropriate legal procedures.</p> <p>4.1.1.4 The CONTRACTOR is obliged to be responsible for the payment of any and all charges, taxes and fines arising from this contract, including the ones of fiscal, social security and/ or labor origin.</p> <p>4.1.1.5 The CONTRACTOR is responsible for damages caused directly to the EMPLOYER or third parties, resulting from its negligence or willful misconduct in the performance of services.</p> <p>4.1.1.6 The CONTRACTOR is responsible for the performance of the object of this contract in full compliance with the specifications and relevant technical standards, being obliged to repair, rework or replace any part of the assignment, that may be defective or present inaccuracies resulting from mistakes in the implementation, within the time period required by the EMPLOYER at no extra charge and subject to the sanctions provided for in this instrument.</p> <p>4.1.1.7 The CONTRACTOR is responsible for the disposal, in fragmented form, of any and all materials related to the contract to ensure total mischaracterization of it. This obligation is valid for disposals that may occur during the development of the work or at any time.</p> <p>4.1.1.8 The CONTRACTOR will be responsible for the study of all contract documents as well as all the information provided by the EMPLOYER for the implementation of the object of this contract, not being allowed, under any circumstances, to claim unawareness of</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>them.</p> <p>4.1.1.9 If, in the studies conducted within their specific activities, as responsible for the execution of this contract, the CONTRACTOR notices any discrepancies, errors or omissions, including any transgression of the technical rules, regulations or laws, it shall notify the fact, in writing and immediately, to the EMPLOYER, for them to be corrected.</p> <p>4.1.1.10 The CONTRACTOR is responsible for the analysis of quantitative and qualitative sufficiency of the information provided by the EMPLOYER. If more information or better information is needed, it should be requested in writing to the EMPLOYER, with supporting reasons.</p> <p>4.1.1.11 The CONTRACTOR shall obtain from the concessionaires of public and private services the registration of interferences related to the Enterprise object of this contract, complying with security measures to maintain the integrity of these networks of utilities. The CONTRACTOR is responsible for all dealings with the public and private concessionaires, related to interference solutions, or interfaces, between the utilities of the Concessionaires and the services object of the contract. Any costs or budgets presented by the Concessionaires, arising from these services, should be directed to the Employer that, after relevant verifications, will be responsible for payments. It is observed that are not included here the costs relating to item 4.1.2.25, of sole responsibility of CONTRACTOR.</p> <p>4.1.1.12 The CONTRACTOR shall perform prospecting and detection of public and private utility networks by equipment (indirect method) in order to confirm the actual location of the utilities supplied by the EMPLOYER or not.</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>4.1.1.13 In relation to the provisions stated on items 4.1.1.11 and 4.1.1.12, the EMPLOYER will help with the information or clarification that the CONTRACTOR may request about the services object of the contract, considering that any assistance or clarification does not exempt the CONTRACTOR's exclusive responsibilities established in those items 4.1.1.11 and 4.1.1.12.</p> <p>4.1.1.14 The CONTRACTOR shall provide the EMPLOYER any and all requested information or clarification on the services in execution, ensuring the access to the supervision of all areas, details or documents relating to the object of this contract, executed or in execution.</p> <p>4.1.1.15 The CONTRACTOR shall provide the control of excavations through monitoring, visualization, analysis and information management of geotechnical and structural data.</p> <p>4.1.1.16 The CONTRACTOR shall conduct its work in accordance with appropriate technical standards, in strict compliance with federal, state and municipal applicable law.</p> <p>4.1.1.17 The CONTRACTOR shall promptly meet all requests, complaints and observations made by the EMPLOYER related to the object of this contract.</p> <p>4.1.1.18 The CONTRACTOR, considering the fact that it is a recovery, continuity and completion of the performed services, must recover/treat the structural elements of concrete, clean the frames exposed to weather, and amend waterproofing layers, when necessary, for the continuity of the services.</p> <p>4.1.1.19 The CONTRACTOR recognizes that any failure in acknowledging all such data and information shall not relieve its responsibility to properly estimate the</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>difficulty or cost of successfully performing the installations, since it had access to site visit, conducted visual/photo inspection and received the necessary clarifications when requested.</p> <p>4.1.1.20 If conditions that may characterize infringement to technical standards, or regulations or laws are found, the CONTRACTOR must immediately communicate the EMPLOYER, in writing, about this possibility, so that any irregularities can be remedied in time.</p> <p>4.1.1.21 The object of this contract will be performed in obedience to the time periods specified in the Work Schedule contained in this contract, to be elaborated according to the Planning Contract Specifications, NOR-09-202 in which the time limits are always counted in consecutive days respecting interim periods (Milestones / Schedule - Metro), counted from the issuance of the Service Order, attached to this Agreement.</p> <p>4.1.1.22 The CONTRACTOR is responsible for paying the consumption of water and sewage, electricity and power, telephone, internet referring to offices, facilities of construction sites, including the execution of all services.</p> <p>4.1.1.23 The CONTRACTOR shall maintain permanently clean the streets and sidewalks in the area directly affected by the works.</p> <p>4.1.1.24 The CONTRACTOR shall be responsible for the collection and disposal of household waste in the areas in which it cannot normally be made by the Municipality of São Paulo, due to the works object of the contract.</p> <p>4.1.1.25 The CONTRACTOR agrees to abide the decision of the EMPLOYER, when requested, to remove of this enterprise any employee or outsourced</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>employees who acts with disrespect in the exercise of its activities, does not contribute to solve conflicts, presents inconvenience conduct, inappropriate behavior or technical ineptitude, without consent of the CONTRACTOR being needed.</p> <p>4.1.1.26 The CONTRACTOR shall follow the procedures contained in the document “GUIDELINES FOR MUTUAL RELATIONSHIP AND INTERFACES FOR THE IMPLEMENTATION OF PHASE II OF LINE 4 - YELLOW”. – attached</p> <p>4.1.1.27 The CONTRACTOR shall request access to perform activities in operational areas through APT- Authorization to work.</p> <p>4.1.1.28 The CONTRACTOR will be responsible for the prompt restoration services of the Overhead Contact Line when performing activities on the Way.</p> <p>4.1.2 OBLIGATIONS RELATED TO THE IMPLEMENTATION OF WORK</p> <p>4.1.2.1 The CONTRACTOR shall present a copy of the Technical Responsibility Note (ART) in accordance with the Federal Law No. 6496 of December 07th, 1977, duly issued by CREA, related to this contract, within thirty (30) days from the signature date of the Contract.</p> <p>4.1.2.2 To keep an Engineer responsible for the contract, who must be in permanent contact with the representative of the EMPLOYER.</p> <p>4.1.2.3 Be represented by the responsible engineer in technical and coordination meetings, when convened.</p> <p>4.1.2.4 The tools and instruments to be used by CONTRACTOR shall be kept measured by public competent entity whose reports or receipts must be submitted to the EMPLOYER when</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>requested.</p> <p>4.1.2.5 The CONTRACTOR shall submit, within ninety (90) days from the contract signature date, its management plan for the implementation of the works taking into consideration all aspects of the management by presenting at least, but not restricted to them, the following plans/programs related to:</p> <ul style="list-style-type: none"> (i) Assessment and Mitigation of Enterprise Risks; (ii) Quality Assurance; (iii) Environmental Monitoring; (iv) Establishment of CIPA. <p>4.1.2.6 Those plans shall be continuously reviewed and updated by the CONTRACTOR and presented and discussed in the Standing Committee for Enterprise Analysis.</p> <p>4.1.2.7 The Assessment and Mitigation of Enterprise Risks plan must comply with the IC 5.00.00.00/3A0-002 and in accordance to the main building characteristics. The CONTRACTOR shall implement, monitor, mitigate and promote periodic discussions to evaluate the risk management, consolidating them in monthly reports.</p> <p>4.1.2.8 The CONTRACTOR agrees to maintain the conditions of accessibility, habitability and safety of buildings during the execution of works under any circumstances. It shall be included in the Plan of Contingency the removal actions of the bordering affected by these commitments.</p> <p>4.1.2.9 The Quality Assurance Plan shall be in accordance with IC- 9.00.00.003A0-002. The CONTRACTOR shall submit monthly reports to the EMPLOYER, including documents generated according to the itemization of this IC- 9.00.00.00/3A0-002.</p> |

| Conditions | Sub-Clause | Data |
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| | | <p>4.1.2.10 The CONTRACTOR shall include in its Quality Assurance System the flowchart of the response and treatment of non-compliances identified by the inspection.</p> <p>4.1.2.11 The works and/or services executed with vices or defects, due to action or unintentional omission, negligence, incompetence, imprudence or use of inappropriate material or of inferior quality, will be demolished and rebuilt under the sole and full responsibility of the CONTRACTOR, without cost to the EMPLOYER, without implying changes of the contractual deadline and without prejudice to the penalties set forth herein. The claim that certain inappropriate material or of inferior quality was provided directly by the EMPLOYER, does not exclude the responsibility of CONTRACTOR.</p> <p>4.1.2.12 The CONTRACTOR agrees to provide reports and bulletins of trials and tests for characterization of materials to be applied, developed by companies whose laboratories are accredited and essays by Activity/ Product area defined by Inmetro in "Aggregates for Concrete", "Fresh Concrete", "Hardened Concrete" and "Soil", "Floors", "Steel", "Waterproofing", and any testing that might be required and in accordance with the technical standards and specifications of the EMPLOYER.</p> <p>4.1.2.13 The CONTRACTOR shall submit the Construction Site Project for consideration by the EMPLOYER and build it as IC- 9.00.00.00/3C4-001. These temporary facilities should be built in areas provided by the EMPLOYER, considering schedules, volume and complexity of the object to perform, difficulties for the transport of building materials and equipment, local weather conditions, aspects of environmental preservation as</p> |

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| | | <p>well as anything that might influence the production capacity of its organization.</p> <p>4.1.2.14 The CONTRACTOR shall allocate up to 300.00 m², to the EMPLOYER, of the total quantity set out in spreadsheet to the facilities of the Construction Site, referring to Administrative Buildings (Offices).</p> <p>4.1.2.15 The CONTRACTOR shall keep the locations of the work under its responsibility, including the building sites, always clean and in order, to enable the progress of works and the best safety conditions, taking the following precautions:</p> <p>4.1.2.16 The CONTRACTOR shall install and maintain lighting in accordance with the safety and occupational health guidelines - MAN- 02-203, contained in this contract.</p> <p>4.1.2.17 The CONTRACTOR shall register all occurrences/events verified in the works, according to the provisions of the Communications clause of the contract.</p> <p>4.1.2.18 The CONTRACTOR agrees to attend the Standing Committee for Enterprise Analysis to be composed by the EMPLOYER, which must evaluate the progress of works and make decisions.</p> <p>4.1.2.19 This Commission, besides representatives of the EMPLOYER, its agents and the CONTRACTOR, will also include representative of the designer and its representative for the Technical Follow-up (s) of the front(s) of work (ATO).</p> <p>4.1.2.20 The CONTRACTOR shall keep permanently in the Building site at least one technical officer (Engineer), resident, duly accredited in writing, alongside the EMPLOYER, to receive its instructions, and to provide to the inspection team of the EMPLOYER, all the necessary assistance and facility for the proper compliance and</p> |

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| | | <p>performance of their tasks.</p> <p>4.1.2.21 The CONTRACTOR shall maintain permanently available water trucks for emergency cleaning.</p> <p>4.1.2.22 The CONTRACTOR is responsible for reporting, in writing, to the inspection team of the EMPLOYER, within a period of twenty four (24) hours, any abnormal occurrence or accidents which have taken place on site of services, regardless of verbal communication, that shall be immediate.</p> <p>4.1.2.23 The CONTRACTOR shall maintain a safety pedestrian transit scheme around the works, including warning signs in order to minimize any possible risk of accidents.</p> <p>4.1.2.24 The CONTRACTOR, based on the received instrumentation data supplied by the EMPLOYER shall analyze and interpret the massif behavior, the bordering buildings and the interferences, taking appropriate action.</p> <p>4.1.2.25 The CONTRACTOR shall provide with public authorities and public utility concessionaires, Siurb, Convias, SABESP, COMGÁS, AES Eletropaulo and others, in advance and in accordance with current regulations, ordinances, laws and technical standards and in full compliance with the competent entities, the procedures, permissions, licenses and authorizations required and appropriated to enable the implementation of the contractual object as well as the payment of fees and charges.</p> <p>4.1.3 OBLIGATIONS RELATED TO ENVIRONMENTAL ISSUES</p> <p>4.1.3.1 The CONTRACTOR shall fully meet the requirements of environmental permissions installation No 524/08 and 2035/11, as well as the technical advice, and the evidence of compliance shall be submitted to the EMPLOYER which will</p> |

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| | | <p>be submitted to the manifestation of the environmental agency.</p> <p>4.1.3.2 The CONTRACTOR will be responsible for implementing the following plans, programs and environmental controls provided in the licensing process:</p> <ul style="list-style-type: none"> • Management program of surplus material from the excavation and earthworks; • Plan for Environmental Management of the Enterprise-PGA; • Monitoring Program of Superficial Water Resources; • Management Plan for Cultural and Archaeological Heritage; • Social Communication Program; • Program of Waste and Effluent Management; • Monitoring Program of Air Quality; • Monitoring program of noise and vibrations; • Soil and Contaminated Sites management program; • Arboreal Management Plan; • Plan for Environmental Control of the Works. <p>4.1.3.3 The CONTRACTOR shall be responsible for answering the requests arising from the licensing agencies and other regulatory agencies and implementers, by obtaining permits from environmental actions, as well as the submission of all documentation requested by the competent entity with the payment of fees for such requests, including amounts related to environmental conversion to the Special Fund for the Environment (FEMA). As example:</p> <p>4.1.3.3.1 Authorization for tree management by the competent</p> |

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| | | <p>environmental agency;</p> <p>4.1.3.3.2 Authorization for intervention in preservation areas;</p> <p>4.1.3.3.3 Approval of São Paulo Transportes - SPTrans relating to changes in itineraries and bus stops of public transportation lines, among others, necessary for the implementation of works.</p> <p>4.1.3.3.4 The acquisition of Grants of Interference issued by the Department of Water and Power - DAEE to perform crossings, works and services that interfere in superficial water resources, as well as the authorization, if it is planned the use of water in watercourse, or reuse of recess water, as determined by the Ordinance DAEE 717/96 and 2850/12 , as well as Joint Resolution SMA / SERKS 01/05 and its updates;</p> <p>4.1.3.3.5 The acquisition of specific environmental permits for pollution sources, according to Decree 8468 of September 8th, 1976 which regulates Law No. 997 of May 5th, 1976 and updated by decree 54487 of June 26th, 2009 ;</p> <p>4.1.3.3.6 To meet Ordinance No. 30 of September 16th, 2011 and Technical Advice 069/11 9th SE / IPHAN / SP of February 08th, 2011 , by the Institute of National Historical and Artistic Heritage - IPHAN;</p> <p>4.1.3.3.7 The acquisition, whenever necessary, of the term for Way Occupation Permission - TPOV, including its costs.</p> <p>4.1.3.3.8 The CONTRACTOR shall submit the Plan for Environmental Management of the Enterprise with the Technical Responsibility Note - ART , containing a detailed description, illustrated with dated photos, of the environmental programs and other requirements of the environmental licensing process, including, but not restricted to them:</p> |

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| | | <ul style="list-style-type: none"> • environmental policy of the CONTRACTOR ; • organizational structure of the Environmental Management of CONTRACTOR and their responsibilities; • monitoring plan of construction procedures and its interface with the environment; • identification, monitoring and elimination of non-conformities procedures; • procedure for qualification, monitoring and inspection system for subcontractors; • Environmental Education and Training plan for employees and subcontractors; • Emergency Action Plan (PAE); • Risk Management Plan (RMP); • management plan of the archaeological monitoring and or archaeological rescue; • plan to archive reports (physical and electronic versions) of all environmental information, including the information received from the community, monitoring and environmental non-conformities measures; • detailed plan for management of all hazardous and non-hazardous waste, surplus materials generated in the enterprise, including estimated quantities, storage, transport, route, movement permits and final disposal site, with their respective operating licenses issued by CETESB; • detailed plan for implementation of the management of potentially contaminated, suspected of |

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| | | <p>contamination and contaminated areas - soil management plan;</p> <ul style="list-style-type: none"> • detailed plan of noise and vibration monitoring; • detailed plan for air quality monitoring; • detailed plan for management of effluents (contaminated or not) generated and / or pumped ; • management plan for superficial drainage; • relocation of public utilities plan; • Traffic Deviation management plan; • detailed plan for the implementation of intervention in Permanent Preservation Area – APP, if applicable, and removal of vegetation; and, • revisions and updates of the plans in each stage of work. <p>4.1.3.3.9 The CONTRACTOR shall submit monthly reports attesting the recovery of all areas affected by the works, including building sites areas, borrow areas, access areas, among others;</p> <p>4.1.3.3.10 The CONTRACTOR shall submit environmental monitoring monthly reports in accordance with the licensing requirements evidencing the implementation of plans, programs and environmental controls, the compliance of installation environmental license and other requirements of the licensing process.</p> <p>4.1.3.3.11 The CONTRACTOR shall ensure that CONTRACTOR and Subcontractors teams have proven experience in the environmental area, presenting curriculum for approval of EMPLOYER.</p> <p>4.1.3.3.12 The CONTRACTOR shall immediately notify the EMPLOYER about</p> |

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| | | <p>any occurrence of environmental abnormality and take appropriate corrective measures;</p> <p>4.1.3.4 The CONTRACTOR shall ensure that the information and occurrences related to the environment are described in the daily implementation of works or other document with similar responsibility.</p> <p>4.1.3.4.1 The CONTRACTOR shall submit the definition of final disposal sites for solid waste and surplus material, as well as the release/disposal of effluents and the corroborating documents of the environmental compliance of the areas planned for disposal of surplus materials and construction waste (all with operating license, as well as transport companies);</p> <p>4.1.3.4.2 The CONTRACTOR shall request the Terms of Environmental Commitment (TCA) required on behalf of the EMPLOYER;</p> <p>4.1.3.4.3 The CONTRACTOR shall perform environmental compensation related to tree management and or conversion to the Special Fund for the Environment (FEMA), and intervention in Permanent Preservation Area (APP).</p> <p>4.1.3.5 To meet the provisions of the State Decree 53047/08, the CONTRACTOR agrees :</p> <p>a) to use products or by-products of exotic origin or native origin wood, which have legal origin.</p> <p>b) to acquire the materials from companies registered in CADMADEIRA, in case of use products or by-products listed in Article 1 of State Decree 53,047 / 08.</p> <p>c) at each measurement, as a condition for receipt of the work or services performed, to present invoices for the acquisition of wood products and by-products, accompanied by only use statement of wood products and by-products of exotic</p> |

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| | | <p>origin, or in the case of using product or by-products listed in Article 1 of this decree, that the acquisitions were made of Legal companies registered in CADMADEIRA.</p> <p>4.1.3.5.1 In case of breach of the above item, paragraphs a, b and c, the contract may be terminated without prejudice to the application of penalties provided in Articles 86-88 of Law 8,666/93 and administrative penalty of ineligibility of contracting with public administration for a period until three (3) years, according to Article 72, § 8, section V of the Federal Law No. 9,605 , of February 12th, 1998, subject to the relevant laws and regulations, regardless of their accountability in the criminal sphere.</p> <p>4.1.3.6 The CONTRACTOR shall carry out monitoring services and/or Archaeological Rescue Program, in accordance with the current regulations, ordinances, laws and technical standards and in complete accordance with the competent entities.</p> <p>4.1.3.7 If the CONTRACTOR fails to comply with any obligation above, the EMPLOYER can carry it in its place and cashing their cost of any CONTRACTOR's claims against the EMPLOYER, or charge them by issuing debt notes or performing the contractual warranty established in the Performance Security Clause, without prejudice to the sanctions provided for in this agreement and legal appropriate measures.</p> <p>4.1.4 OBLIGATIONS RELATED TO SERVICE PROVIDERS EMPLOYEES</p> <p>4.1.4.1 The CONTRACTOR is responsible for the conduct that employees shall have during working hours in the EMPLOYER'S enclosure, ensuring also that they maintain proper respect and courtesy in dealing with the employees of</p> |

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| | | <p>the EMPLOYER as well as the effect that are met rigorously the requirements issued by the Internal Accident Prevention Commission (CIPA) and particularly those contained in the legislation.</p> <p>4.1.4.2 The CONTRACTOR's employees when conducting services in the EMPLOYER'S enclosure must be properly identified with badge in a visible place and wearing uniform.</p> <p>4.1.4.3 The staff allocated to the service shall have professional link with the CONTRACTOR which may be through social contract, registration on the working papers, employee form or work contract, including autonomous professionals that meet the requirements and are technically accountable for the performance of the services.</p> <p>4.1.4.4 The CONTRACTOR shall comply with safety and health at work norms, contained in the Labor Code, Ordinance No. 3.214/78, from Ministry of Labor, particularly those stated on the Normative Instrument of the EMPLOYER (NOR 00-206 and MAN 02-203), contained in this contract and also other provisions related to the matter. The non-observance of what is set forth herein shall lead to termination of the Agreement, without prejudice to other penalties provided for in this agreement.</p> <p>4.1.4.5 The CONTRACTOR besides the current legal postulates, at the federal, state or municipal level, agrees to comply strictly the instructions in the Normative Instrument for the Environmental Guidelines and Safety and Occupational Health, contained in this contract, issued by the EMPLOYER under penalty, in addition to incurring the legal and contractual penalties established, of having note in its registration for noncompliance with any safety standards.</p> |

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| | | <p>4.1.4.6 The CONTRACTOR shall assume all responsibilities and take all necessary measures in compliance or removal of its employees to hospitals in case of accident or sudden illness.</p> <p>4.1.4.6.1 In cases where the EMPLOYER has to arrange the removal, the cost incurred will be reimbursed upon approval of measurements and releases of Services Execution Certificates.</p> <p>4.1.4.7 The CONTRACTOR is responsible for reporting, in writing, to the inspection team of the EMPLOYER, within a period of twenty four (24) hours, any abnormal occurrence or accidents which have taken place on site of services, regardless of verbal communication, that should be immediate.</p> <p>4.1.4.8 The CONTRACTOR, in accordance with State Decree No. 55,125 / 09 and No. 55,126/09, that established the Program of Insertion of Young Egresses on Social Measure Compliance in Labor Market and the Program of Insertion of Egresses from Penitentiary System in Labor Market - PRO-EGRESSO and based on the provisions of Decree n 56,290, of October 15th, 2010, related to the compliance with the PRO-EGRESSO program, shall provide, in the contract perform, vacancies for prisoners, egresses, abiding penalties and alternative measures and adolescents in conflict with the law, with the assistance of the registers kept by the Department of Employment and Labor Relations and the Department of Prison Administration at least in the following proportion:</p> <p>4.1.4.9 five percent (5%) of vacancies to a minimum quota of twenty (20) workers;</p> <p>4.1.4.10 One (1) vacancy when hiring six (06) to nineteen (19) workers, provided the vacancy availability of hiring up to five (5)</p> |

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| | | <p>employees;</p> <p>4.1.4.11 The CONTRACTOR shall submit to the contract manager within five (5) working days from the effective start of the execution of the services, the list of employees who will occupy the available vacancies, and the CONTRACTOR is responsible for maintain throughout the execution of the contract such availability of vacancies, monthly updating the presented list.</p> <p>4.1.4.12 The CONTRACTOR agrees to maintain, throughout the execution of the contract, including therein its extensions, the ratio of proportionality between the vacancies available to the beneficiaries of the PRO-EGRESSO program and those required for the performance of the contract, in accordance with the provisions of Decrees No. 55,125/09, 55,126/09 and 56,290/10, under penalty of fine.</p> <p>4.1.5 OBLIGATIONS RELATED TO FORWARD DOCUMENTS :</p> <p>4.1.5.1 The CONTRACTOR shall ensure, at its responsibility, the correct submission of billing and other documents related with this Agreement, including making sure the recipient's identification, in order to avoid misplacements which may result in delays or even suspension in settlement commitments and obligations by the EMPLOYER.</p> <p>4.1.6 OBLIGATIONS RELATED TO SOCIAL COMMUNICATION AND INTERFERENCE IN THE NEIGHBORHOOD</p> <p>4.1.6.1 The CONTRACTOR shall develop a social communication work in order to inform the various segments of the community about the works in all its aspects: investment and execution until the pre-operating stage.</p> <p>4.1.6.2 The CONTRACTOR shall</p> |

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| | | <p>implement, after approval by the EMPLOYER, a Plan of Social Communication consolidating the set of guidelines that aims the management of Social Communication, in order to define the target audience, critical activities and activities that may impact the population, the media able to clarify and/or inform the population and how to act upon complaints.</p> <p>4.1.6.3 The Workplaces in various work fronts, assembly and reception of material shall have their location, confinement, layout, signaling, procedures, equipment, materials and work schedule compatible with the neighborhood, in order to maintain tolerable levels of interference in the following aspects:</p> <ul style="list-style-type: none"> a) Control of dust and gases, predicting in its procedures that the emission of air pollutants do not exceed the legal standards; b) Restriction for noise emissions; c) Security of persons and property; d) visual or physical intrusion of spaces, materials, equipment or personnel which would harm the operation of activities, leisure, rest, security and privacy of residents, users, visitors and employees; e) Appearance of illegal or socially unacceptable activities. <p>4.1.6.4 The CONTRACTOR shall implement a Central Public Service to meet the complaints of the neighboring relating to any damages in buildings, noise, vibration and other impacts that may be caused by the works.</p> |
| Performance Security | 4.2 | 4.2.1 For the faithful compliance with the obligations assumed, the CONTRACTOR has provided a performance security of 10% (ten percent) of the total value of this contract, with a term of validity that covers the |

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| | | <p>entire duration of the contract.</p> <p>4.2.1.1 The coverage value of such security may be reduced if it is of interest to the CONTRACTOR, in proportion to the execution of the Agreement and at the same time of adjustment of prices, becoming due over the updated balance thereof, since it is specifically attested by the manager appointed by the EMPLOYER for this agreement and there is no pending issues relating to the part already executed of the Contract.</p> <p>4.2.1.2 There may be substitution between the modalities of security mentioned in the bidding documents, namely: cash deposit, government bonds, performance bond or bank guarantee during the term of this Agreement, since approved by the EMPLOYER.</p> <p>4.2.1.3 The performance security if given by a bank guarantee, should have its value expressed in real (R\$) and, if applicable, with automatic update of its value, at the same time, form and periodicity set forth in the Adjustments Clause of this Agreement and shall be submitted in accordance with the form attached to the bidding documents.</p> <p>4.2.1.4. In case of an amendment to the Contract involving increase or supplement in its value, the CONTRACTOR shall provide, within thirty (30) days from the date of issuing of the respective Amendment, the due complementing of the security value in order to maintain the equivalence already established of 10% (ten percent), being subject to the procedure provided for in item 4.2.1.6, and without prejudice to the application of the penalties provided in this contract.</p> <p>4.2.1.4.1 In case of an amendment to the Contract involving extension of the contract period, the CONTRACTOR</p> |

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| | | <p>shall provide the adequate regularization of the security in order to maintain its validity compatible with the Agreement's validity, at least ten (10) days before the date of expiration of the security, being subject to the procedure provided for in item 4.2.1.6, and without prejudice to the penalties provided in the contract.</p> <p>4.2.1.4.2. In case of amendment for change in the corporate name, the CONTRACTOR shall also provide, in the same period indicated in item 4.2.1.6, the proper regularization of the security when provided in the form of bank guarantee, performance bonds or government bonds when they are nominal.</p> <p>4.2.1.4.3 In this situation, if it is of interest to the CONTRACTOR, the security performance may also be provided on the updated balance to be performed, considered for such the sum of the adjusted value of the remaining balance of the contract, provided that effectively attested by the Contract Manager and since there is no pending issues relating to the part already performed.</p> <p>4.2.1.4.4 The security complementation stated in the items above shall be delivered to the Departamento de Controle de Compromissos - (COM), located at Rua Boa Vista, 175 - 6th floor - Block "B".</p> <p>4.2.1.5. In the case of the modality deposit in cash or performance bond, the CONTRACTOR undertakes, regardless of any prior notice of the EMPLOYER to submit its due complement up to the last day of the month of the price adjustment.</p> <p>4.2.1.6 The Failure to complement the contractual performance security,</p> |

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| | | <p>whatever the modality of security performance chosen, implies the retention of CONTRACTOR's credits at the moment the complement was not paid, up to the limit predicted for the complement of the security performance, characterizing thus providing the security performance as cash deposit.</p> <p>4.2.2 The EMPLOYER shall return to the CONTRACTOR (s) the value (s) held (s) due to the application of the retention rules set forth herein, within ten (10) days after the date of the addition or renewal of the performance security, without any type of update.</p> <p>4.2.3 If met all the terms of this Agreement that relate to the security provided, within thirty (30) days after the drawing up of the Final Acceptance Statement, there will be the return of all or any balance thereof, as appropriate.</p> <p>4.2.4 The security when paid in cash or its cash balance will be returned updated based on the variation of the IPC - Price Index to Consumer of the Municipality of São Paulo, published by the Institute for Economic Research - FIPE, calculated "pro rata tempore "from the deposit date until the effective return date, except for the procedure set out in item 4.2.1.6, according to the formula below:</p> $VDA = VDO \times \left(\frac{IPC - FIPE 1}{IPC - FIPE 0} \right)^{(n/m)} \times \left(\frac{IPC - FIPE 2}{IPC - FIPE 1} \right) \times \left(\frac{IPC - FIPE 3}{IPC - FIPE 2} \right)^{(y/z)}$ <p>Where:</p> <p>VDA = updated value of the cash security;</p> <p>VDO = original value of cash security;</p> <p>IPC-FIPE 0 = IPC-FIPE corresponding to the third (3rd) month preceding the month of deposit of the security;</p> |

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| | | <p>IPC-FIPE 1 = IPC-FIPE corresponding to the 2nd (second) month preceding the month of deposit of the security;</p> <p>IPC-FIPE 2 = IPC-FIPE corresponding to the third (3rd) month preceding the month of the Return of the security;</p> <p>IPC-FIPE 3 = IPC-FIPE corresponding to the 2nd (second) month preceding the month of the Return of the security;</p> <p>n = number of days counted from the date of the deposit of the security, exclusive, until the last day of the month of deposit of the security, including;</p> <p>m = number of days in the month of the deposit of the security;</p> <p>y = number of days counted from the first day of the month of the return of the security, until the day of the return of the security;</p> <p>z = number of days in the month of the return of the security.</p> <p>4.2.4.1. In the case of the return of the security occurs in the same month of the deposit, the formula to be applied is:</p> $VDA = VDO \times \left(\frac{IPC-FIPE 1}{IPC-FIPE 0} \right)^{(n/m)} \quad \text{where:}$ <p>VDA = updated value of the cash security;</p> <p>VDO = original security value;</p> <p>IPC-FIPE 0 = IPC-FIPE corresponding to the third (3rd) month preceding the month of deposit of the security / return of the security;</p> <p>IPC-FIPE 1 = IPC-FIPE corresponding to the 2nd (second) month preceding the month of deposit of the security / return of the security;</p> <p>n = number of days from the date of deposit, exclusive, up to the date of actual return of the security, including;</p> <p>m = number of days in the month of the</p> |

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| | | deposit of the security/return of the security. |
| Subcontractor | 4.4 | <p>4.4.1 It will be allowed to subcontract companies for the provision of auxiliary services to the performance of the contract object, up to 30% (thirty percent) of the total value of the contract, without changing the obligations and responsibilities of the CONTRACTOR, which will continue to be responsible to the EMPLOYER and public and private agencies and other entities, by the provisions of this Agreement, including the quality of the subcontracted services:</p> <p>4.4.1.1 It may be subcontracted auxiliary services from the groups of items of the Bill of Quantities, limited to 30% of the Contract value, such as:</p> <ul style="list-style-type: none"> - Foundations and Lowering; - Treatment and Monitoring of Contaminated Areas; - Waterproofing; - Metal Structures, Roofing/Cover, and Closing; - Visual Communication; - Hydraulics. <p>4.4.2 Notwithstanding the CONTRACTOR being responsible for the terms of the agreement, the SUBCONTRACTOR will respond jointly by them before the EMPLOYER, agencies and public and private entities and third parties with respect to services performed by it.</p> <p>4.4.3 Each and every subcontracting shall be previously submitted to the EMPLOYER's approval, which in its sole discretion, may approve or not the proposed subcontract, under the following conditions:</p> <p>4.4.3.1 The SUBCONTRACTOR will not be allowed to issue invoices directly</p> |

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| | | <p>to the EMPLOYER;</p> <p>4.4.3.2 The SUBCONTRACTOR must have its registration approved by the EMPLOYER, and keep it properly updated, thus meeting all requirements of legal, tax compliance and labor, economic and financial qualification and statements required in the bidding process;</p> <p>4.4.4 In the subcontract, the SUBCONTRACTOR shall demonstrate to have the technical qualification to execute the works and services subject of the subcontract, focusing on the standards and technical specifications.</p> <p>4.4.5 The quality assurance of the performed services is the sole responsibility of the CONTRACTOR.</p> <p>4.4.6 In the event of non-approval of certain subcontracting, the CONTRACTOR may present a new SUBCONTRACTOR under the same proposed conditions, without the CONTRACTOR being relieved of responsibility on the time periods set forth in the documents provided in the Agreement.</p> |
| <p>Quality Assurance Inclusion of Subclause</p> | <p>4.9</p> | <p>4.9.1 TECHNICAL WARRANTY OF THE CIVIL WORKS</p> <p>The CONTRACTOR has the obligation, for five (5) years counted from the Final Acceptance Statement – TAD mentioned on Clause 11.9 – Performance Certificate of this agreement, to repair, at its own cost, any defects, when due to proven technical fault in the performance of the works object of this contract, being responsible for the safety and soundness of the performed services, as provided in Article 618 of the Brazilian Civil Code.</p> |
| <p>Electricity, Water and Gas</p> | <p>4.19</p> | <p>The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he</p> |

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| Clause Rectification | | <p>may require for his construction activities and to the extent defined in the Specifications, for the tests.</p> <p>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 Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.</p> <p>The Contractor is responsible for paying the consumption of water and sewage, electricity and power, telephone, internet referring to offices, facilities of construction sites, including during the execution of all services.</p> |
| Progress Reports Inclusion of Subclauses | 4.21 | <p>4.21.1 The CONTRACTOR shall submit the Progress Report for review and approval of the EMPLOYER, prepared in accordance with the Contract Specification - Instruments of Planning and Follow-up, as well as meet the requirements of Sub-Clause 4.21 - Progress Reports.</p> <p>4.21.2 Since the approval of the sample, the CONTRACTOR shall send monthly to the EMPLOYER the reports mentioned in subclause 4.21 - Progress Reports, in accordance with the approved sample;</p> <p>4.21.3 The Progress Report, in addition to what is stipulated in the Contract Specification - Instruments of Planning and Follow-up shall also contain the record of the probable consequences and statement of corrective actions to be taken when some activity is delayed in relation to what was predicted.</p> <p>4.21.4 The CONTRACTOR must comply with the requests of the EMPLOYER for</p> |

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| | | the inclusion of information, control and / or monitoring relating to technical issues of the engineering scope. |
| <p>Payments to nominated subcontractors</p> <p>And</p> <p>Evidence of Payments</p> | 5.3 and 5.4 | <p>NOT APPLICABLE</p> <p>It shall be observed the provisions stated on subclause 4.4.3.1 of these Particular Conditions:</p> <p>“The SUBCONTRACTOR will not be allowed to issue invoices directly to the EMPLOYER;”</p> |
| <p>Normal working hours</p> | 6.5 | <p>In accordance with Brazilian Law.</p> <p>The completion of the works takes into account the activities to be performed at the stations and part of these services will be executed on operating area and in restricted hours.</p> <p>Restricted hours mean activities to be performed between 01 a.m and 03 a.m, from Monday to Saturday in operational areas of the stations, except Vila Sonia station.</p> <p>Services to be performed with interference in operational areas such as:</p> <ul style="list-style-type: none"> - Adequacy of the platforms edges; - Activities under the Platform/Cable basement; - Completion of Metallic Mezzanine; -Treatment of the Dome of the Tunnel / Station Structure. <p>Notes: See document “GUIDELINES FOR MUTUAL RELATIONSHIP AND INTERFACES FOR THE IMPLEMENTATION OF PHASE II OF LINE 4 - YELLOW”. - attached;</p> |
| <p>Inspection</p> <p>Inclusion of Subclauses</p> | 7.3 | <p>7.3.1 SUPERVISION</p> <p>7.3.1.1 The EMPLOYER shall perform supervision of the services, directly or by designated representatives, stopping any activity in progress that, proven, is not being conducted in accordance with the</p> |

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| | | <p>technical standards, service specifications and the contractual scope.</p> <p>7.3.1.2 For SUPERVISION purpose the CONTRACTOR will be required to:</p> <p>7.3.1.2.1. Provide information and clarifications requested by the EMPLOYER or the representative designated by the employer, guaranteeing access, at any time, to documents relating to services performed or being performed, as well as to their site and sites of subcontractors.</p> <p>7.3.1.2.2. Answer promptly to requests, demands, complaints or observations made by the EMPLOYER or the representative designated by the employer , redoing or correcting, when appropriate and at its expense, the parts of the services that do not comply with their designs, specifications, standards or Services Orders;</p> <p>7.3.1.2.3. Stop any service being performed that is proven not being performed with proper technique or that endanger public safety or property of others, regardless of request of the EMPLOYER;</p> <p>7.3.1.2.4. Inform, in writing, to the employer, in a period of twenty-four hours, any abnormal occurrence or accidents which have taken place on the site of services, regardless of verbal communication that should be immediate.</p> <p>7.3.1.3. To exercise full supervision over the performance of the services, the EMPLOYER will have broad powers, including to:</p> <p>7.3.1.3.1. Order the immediate removal of its facilities, of CONTRACTOR's employee who is without uniform or without necessary personal protective equipment, or which hinder or impede the supervisory action or whose the stay in the area is classified as inappropriate due to inappropriate behavior or technical inability to perform the services;</p> |

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| | | <p>7.3.1.3.2. Require the CONTRACTOR to have strict obedience to the Project, specifications and contractual rules;</p> <p>7.3.1.3.3. Reject or stop the execution of non-compliant services and require them to be remade in the extent and period stipulated by the employer;</p> <p>7.3.1.3.4. Forbid the use of materials, equipment, work methods or executive processes that do not comply with the requirements and technical and administrative standards stipulated by this Agreement;</p> <p>7.3.1.4. The act or omission, total or partial, of supervision by the EMPLOYER does not restrict nor release the CONTRACTOR from full responsibility for the costs and services that are in its assignment and competence, not even the obligations assumed herein.</p> <p>7.3.2. INSPECTION</p> <p>7.3.2.1. To perform the inspection by the employer or by his designated representative, according to criteria established in the technical specifications, the CONTRACTOR must ensure that it has a place and appropriate testing instrumental and human resources specifically designated for the activity, independent of the inspection of the Employer, the CONTRACTOR is obliged to maintain a permanent quality control scheme over all materials, components, processes and equipment.</p> <p>7.3.2.1.1. Before the start of manufacturing, if applicable, the CONTRACTOR must submit for approval of the EMPLOYER, the Inspection and Test Plan and the Inspection Procedures for each supply item.</p> <p>7.3.2.1.2. The CONTRACTOR must communicate within at least sixty (60) days, in writing, the start date of each</p> |

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| | | <p>inspection, regardless of any presented scheduled dates.</p> <p>7.3.2.1.3. If the CONTRACTOR informs the EMPLOYER about the date of the inspection, and by contractor's fault, the inspection does not occur, the contractor will bear all costs of reinspection (fees, stays and displacement), of the EMPLOYER's Inspector(s) and agents, and the calculated amount will be deducted from the next payment to be made to the CONTRACTOR.</p> <p>7.3.2.2 For Inspection services to be performed in any subcontractors or manufacturers facilities, the CONTRACTOR is required to maintain the same conditions set out in item 7.3.1 above.</p> <p>7.3.2.3. All requests, complaints, demands or observations related to the work, and made by the EMPLOYER to the CONTRACTOR, or in appropriate cases, by the CONTRACTOR to the EMPLOYER, will only produce binding effects if processed in writing, in the manner and conditions determined by the Employer.</p> <p>7.3.2.3.1 Such requests should be submitted as determined in the clause of Communications of this agreement.</p> |

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| <p>Programme</p> <p>Inclusion of Subclauses</p> | 8.3 | <p>8.3.1 The CONTRACTOR must submit for review and approval of the EMPLOYER the Schedule mentioned in subclause 8.3 - Programme, as well the Work schedule of the enterprise, both prepared in accordance with the Planning Contract Specifications, NOR-09-202 in which the time limits are counted in calendar days, respecting interim periods (Milestones / Schedule - Metro), counted from the issuance of the Service Order.</p> <p>8.3.2 After the analysis by the EMPLOYER, the CONTRACTOR must answer any comments related to the approval of the document within a maximum of fifteen (15) calendar days from its communication. Up to the limit of two (2) new submissions will be tolerated, considered the same deadline to respond to comments;</p> <p>8.3.3 After the approval by the EMPLOYER, the Work Schedule will integrate the contract and will guide the implementation of all activities object of this agreement.</p> <p>8.3.4 Within 15 days from the approval of the Work Schedule, the CONTRACTOR must submit for review and approval of the EMPLOYER, the Evolution Sheet prepared in accordance with the Contract Specification - Instruments for Planning and Follow-Up contained in the bidding documents.</p> <p>8.3.5 After the analysis of the Evolution Sheet by the EMPLOYER, the CONTRACTOR must answer any comments relating to the approval of the document no later than 15 calendar days from its communication. Up to the limit of two (2) new submissions will be tolerated, considered the same deadline to respond to comments;</p> |

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| | | 8.3.6 The CONTRACTOR when reviewing the schedule shall present it for review and approval of the EMPLOYER, respecting the deadline for answering the comments determined on items 8.3.2 and 8.3.5 |
| Delay damages for the Works | 8.7 & 14.15(b) | In accordance with sub-clause 8.7 below. |
| Maximum amount of delay damages | 8.7 | <p>1 In case of total or partial default of this agreement by the CONTRACTOR, the EMPLOYER, depending on the fact gravity and excepting the cases contemplated by the sole paragraph of Article 393 of the Brazilian Civil Code, can, independently of at any time exercising its right of terminating this agreement, cumulatively or severally impose the following penalties:</p> <p>1.1 Warning and its respective registration in the Reference File.</p> <p>1.2 A fine of 0.005% (five thousandths percent) of this Agreement updated Total Price, per day of delay incident to each Milestone specified on attachment 6 to the Particular Conditions of Contract.</p> <p>1.3 A fine of 0.02% (two hundredths percent) of the uptadated Total Price and twice as much in case of reincidence , in case of non-compliance of any other clauses or conditions of this Agreement, except for those which sanctions and regularization procedures are those specifically established.</p> <p>1.4 A fine of 5% (five percent) of the updated Total Price, due to its object waiver or non-compliance.</p> <p>1.5 A fine of 5% (five percent) of the updated remaining Total Price, due to the contracted object incomplection.</p> <p>1.6 A fine of 0.001% (one thousandth percent) of the updated total Price, per day exceeding the deadline established for the Performance Bond submission and/or of its complementation.</p> <p>2. In case the Employer asks, by the Contractor's request, and due to the need of performance of the works, access "windows" to the operational area of Line 4, and, for any reason, the Contractor does not fulfill the</p> |

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| | | <p>performance of the planned services, the Employer shall apply a fine of 0.001% (one thousandth percent) of the updated total Price of the Contract, per hour of utilization determined on the Access Plan.</p> <p>3 Upon the fines imposition, the EMPLOYER will deduct them from the payments to be made to the CONTRACTOR just after their imposition.</p> <p>4 In case there are not any payments forecast, effectively configured, the CONTRACTOR must pay the fine within forty-eight hours counted as from the respective billing document receipt, at the Treasury Department of COMPANHIA DO METRÔ, located at Rua Boa Vista, 175 – 3rd floor, São Paulo – State of São Paulo, under penalty of having the performance security executed, and becoming liable to the applicable court procedures.</p> <p>5 The failure to pay the fine within the stipulated deadline will also imply incidence of default interest of the variation of “IPC – Índice de Preços ao Consumidor do município de São Paulo, published by FIPE – Fundação Instituto de Pesquisas Econômicas” "pro rata tempore", from the payment deadline until its effective payment, according to the formula contemplated by the Payments Clause of this agreement.</p> <p>6 The payment of the fines established in this Clause, or its deduction as herein specified, except the fine related to withdrawal or total failure of the object of this Contract, does not exempt the CONTRACTOR of faithfully performing its obligations and responsibilities contracted herein.</p> <p>6.1 The payment of the fines established in this Clause, or its deduction as herein specified, does not exempt the CONTRACTOR of repairing any possible damages or direct or indirect losses that may be caused to the EMPLOYER, its employees, proxies, users and/or third parties derived from this agreement object fulfillment.</p> <p>6.1.1 The payment of the fines stated above shall not imply revision of the Time Schedule and waive the CONTRACTOR to meet further Events.</p> |

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| | | 7. The penalties stated on this clause, when separately or cumulatively imposed, cannot exceed the limit of 10% of the total value of the contract, without detriment of the possibility to impose other sanctions of non-pecuniary nature and termination. |
| Suspension of Work Inclusion of Subclauses | 8.8 | <p>8.8.1. The Employer may order the suspension, of all or part, of the performance of the services, by notice in writing to the CONTRACTOR, at least fifteen (15) days in advance.</p> <p>8.8.2. Occurring what is mentioned above, the employer will indicate, for guidance, the estimated time and the suspension conditions.</p> <p>8.8.3. In such case, the employer shall pay to the CONTRACTOR only the amount due under and pursuant to the Payments Clause of this agreement, for services performed up to the effective date of suspension of the activities, as provided in this clause.</p> <p>8.8.4. After 120 (one hundred and twenty) days from the date of the suspension established by the EMPLOYER, the CONTRACTOR must formalize in writing within 15 (fifteen) days, any interest in termination or in suspension of its obligations until the situation turns normalized. The silence of the Contractor after this deadline will be considered as an option for the suspension of its obligations.</p> <p>8.8.5. The Communication for resumption of the services must be made in writing by the EMPLOYER, with a minimum of fifteen (15) days before the date set for resumption, in this period, the overall planning of the services must be reviewed and readjusted the "Service Orders" without, however, violating any clause or condition set in this agreement.</p> |
| Payment for Plant and Materials in Event of Suspension | 8.10 | <p>NOT APPLICABLE</p> <p>It shall be observed the provisions stated on Clause 8.8.3 of these Particular Conditions</p> |
| Performance Certificate Inclusion of Subclauses | 11.9 | <p>11.9.1. ACCEPTANCE</p> <p>11.9.1.1. OF CIVIL WORKS</p> <p>11.9.1.1.1. The civil works defined in this agreement, will be received on a temporary basis, if performed with faithful observance of this agreement, by issuing</p> |

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| | | <p>the "Provisional Acceptance Statement" - TAP, as defined below:</p> <p>11.9.1.1.2. The "Provisional Acceptance Statement " will be issued 15 days after the inspection to be carried out by the EMPLOYER CMCP-Commission for Monitoring and Concessions and permissions and the CONCESSIONAIRE Via Quatro, within fifteen (15) days from the date on which the CONTRACTOR communicates in writing the completion of works and services, and provided that they are approved without hindering pending matters.</p> <p>11.9.1.1.3 The "Final Acceptance Statement (TAD)" will be issued within 90 (ninety) days from the issuance of the Provisional Acceptance Statement (TAP), with the removal of any non-conformity and pending matters, identified in the issuance of the Provisional Acceptance Statement - TAP, by the Employer's judgment and by drafting the "Final Acceptance Statement - TAD".</p> |
| Provisional Sums | 13.5.(b)(ii) | NOT APPLICABLE |

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| Adjustments for Changes in Cost | 13.8 | <p>1 The prices established in the Bill of Quantities may have their amounts adjusted as from one (1) year after the base date, with periodicity of 12 months, in compliance with the legislation that disposes about the Plano Real and the National Monetary System, and observed the terms of the State Decree 49.326, of 12/12/2003, one applying the following adjustment formulas:</p> $R = P_o[(aMOI/MO_0 + bMA1/MA_0 + cEQ1 / EQ_0 + dTE1/TE_0)-1]$ <p>where:</p> <p>R = Adjustment value</p> <p>P_o= value of the measurement to be adjusted</p> <p>a, b, c, d = percentage of incidence of the value relating to labor, materials, equipment and third party services;</p> <p>MO₀ = Price Index for General Services with Predominance of Manpower, published by the Official Gazette of the State of São Paulo, State Decree no. 27.133 of 06/26/1987, related to the month before that of the base-date of the Contract;</p> <p>MO₁ = same index, but related to the month preceding the month of application of the price adjustment, according to the periodicity established in the current legislation at the time.</p> <p>MA₀= Economic Index 1004819 - IPA - EP - Intermediate Goods - Materials & Building Components, published by the Conjuntura Econômica magazine from Fundação Getulio Vargas, related to the month preceding the base date of the contract.</p> <p>MA₁= Same index, but related to the month preceding the month of application of the price adjustment, according to the periodicity established in the current legislation at the time.</p> |

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| | | <p>EQ0= Economic index 1004808 - IPA - EB - DI - Finished Goods - Investment Goods, published by the Conjuntura Econômica magazine of Fundação Getulio Vargas, related to the month preceding the base date of the contract.</p> <p>EQ1= Same index, but related to the month preceding the month of application of the price adjustment, according to the periodicity established in the current legislation at the time.</p> <p>TE0= Cost of Construction Index - Municipalities of the Capitals - São Paulo - Total (54CC column) published by the Conjuntura Econômica magazine of Fundação Getulio Vargas, related to the month preceding the base date of the Agreement.</p> <p>TE1= Same index, but related to the month preceding the month of application of the price adjustment, according to the periodicity established in the current legislation at the time.</p> <p>a = 0,16 b = 0,26 c = 0,15 d = 0,43</p> |

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| | | <p>2 In the hypothesis of the occasional publication of legislation in conflict with the provisions of this Clause, the parties hereby agree to its adequacy to the applicable provisions of law.</p> <p>3 The prices adjustment dealt in this Clause will fall only upon events that are stipulated, by agreement, for accomplishment after the date of its application.</p> <p>4 In case until the issuing of the billing document the corresponding adjustment index is not known, and in order to allow its calculation to be made on the date of its application, it will be adopted, on a provisional basis, the index calculated based on the last monthly variation available, projected by the number of missing months, until the date of its application, without prejudice to the observance of the periodicity of the adjustment provided for in this clause.</p> <p>5 At the time of the publication of the definitive indexes, the ascertaining and the performance of the corresponding financial adjustment of the difference for more or for less will be effected, considered the same date of the expiration of the billing document that gave origin to the occurrence, and subject to the same rule provided for in the Payments Clause of this Agreement.</p> <p>6 In the eventuality of any of the indicators referred to in the item 1 being suppressed, the EMPLOYER will start, immediately, the application of the substitute indicators, in the terms of the applicable legislation.</p> |

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| | | <p>7 In case a substitute index is not made official, the EMPLOYER and the CONTRACTOR will define, in common agreement, the new indicator, if so allows the legislation.</p> <p>8 The adjustment values shall be indicated in separate from the value of the principal, in the body of the billing document, which will be accompanied of the respective calculation brief.</p> |
| Total advance payment | 14.2 | 10% Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable. |
| Repayment amortization rate of advance payment | 14.2(b) | 1% of the percentage of the Accepted Contract Amount to be paid at every effected payment, considering that this amortization will begin when the amount of work certified attains 30% of the Contract Price and limited to the value of the advance stated on item 14.2 above. |
| Percentage of Retention | 14.3 | 10% |
| Limit of Retention Money | 14.3 | 10% of the Accepted Contract Amount. |
| Schedule of Payments | 14.4 | <p>1 The amount related to each item of the bill of quantities shall be paid by the employer in accordance with the respective documents:</p> <p>1. FINISHING SERVICES - PAYMENT INSTRUCTION - ATTACHMENT 1</p> <p>2. HYDRAULICS- - PAYMENT INSTRUCTION - ATTACHMENT 2</p> <p>3. VISUAL COMMUNICATION - PAYMENT INSTRUCTION - ATTACHMENT 3</p> <p>4. REURBANIZATION AND LANDSCAPING - PAYMENT INSTRUCTION - ATTACHMENT 4</p> <p>The other items of the Bill of Quantities will be paid in accordance with the Measurement Instructions attached to this contract.</p> <p>2. MEASUREMENT</p> <p>2.1 The services object of the contract agreement will be paid through presentation</p> |

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| | | <p>by the CONTRACTOR, conditioned to the approval of the EMPLOYER, of monthly measurements, jointly with the Service Orders.</p> <p>2.2 The elaboration, processing and maintenance/support of the measurement program shall be made using the Measurement System – ADETI. The CONTRACTOR is responsible for the purchase of this system.</p> <p>2.3 The measurement shall be made directly by the CONTRACTOR and will be sequentially numbered, discriminating the number of this Contract Agreement, the object, the services performed and the respective quantities, as well as the places of its performance.</p> <p>2.4 The measurement will be forwarded in 2 (two) counterparts directly to the manager of the agreement, in accordance with the management letter sent by the EMPLOYER.</p> <p>2.5 The measurement having been made, their results will be forwarded by the CONTRACTOR to the EMPLOYER, until the day 5 (five) of the month subsequent to that of the month verified, for examination and approval or rejection, what will occur within 10 (ten) days, counting as of the date of delivery of the measurement.</p> <p>2.6 The services that have not been contained in the measurement corresponding to the months in which they have been made, will be presented in posterior measurement, by the value of the time of its performance, obeyed the other conditions of the agreement.</p> <p>2.7 In case of rejection of part of the measurement, by responsibility of the CONTRACTOR, the following will be observed:</p> <p>2.7.1 The non-rejected parcel will follow the normal processing, as established in this Clause.</p> <p>2.7.2 The parcel of measurement rejected by the EMPLOYER will be returned to the CONTRACTOR for canceling or correction. In this case the time periods established in this Clause will be counted again, as from its resubmitting.</p> |

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| | | <p>2.7.3 The total or partial return of the measurement and/or of the non-approved billing documents, as well as the deadlines for its resubmitting and reexamination, under no hypothesis whatsoever will be reason for suspension of the performance of the contracted services.</p> <p>3 PAYMENT</p> <p>3.1 The payment to the CONTRACTOR will be made in the 30th (thirtieth) day subsequent to the month of performance of the events, as long as such events have been pointed out in the monthly measurement and approved by the EMPLOYER, and will be paid according to the events and payments percentages described in this Particular Conditions.</p> <p>3.2 The payment will be made through credit in current account that the CONTRACTOR will keep in BANCO DO BRASIL S.A.</p> <p>3.3 The CONTRACTOR shall consider as acquitted all the duplicates or other billing documents drafted against the EMPLOYER, by the mere effecting of the corresponding credit in its current account.</p> <p>3.4 In case of delays in the payments of the Contract price, by reasons attributable to the EMPLOYER, the amounts will be adjusted based on the variation of IPC - Price Index of the Consumer of São Paulo, published by the Institute for Economic Research - FIPE, calculated "pro rata -tempore" from the payment expiration date until the effective date of the payment, according to the formula below. Exceptions are delays due to unforeseeable circumstances or force majeure under Article 393 of the Brazilian Civil Code:</p> |

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| | | $VDA = VDO \times \frac{(n/m)}{IPC-FIPE\ 0} \times \frac{(IPC-FIPE\ 2)}{IPC-FIPE\ 1} \times \frac{(y/z)}{IPC-FIPE\ 2} \times (IPC-FIPE\ 3)$ <p>Where:</p> <p>VDA = updated value of the payment in delay;</p> <p>VDO = value in delay;</p> <p>IPC-FIPE 0 = IPC-FIPE corresponding to the third (3rd) month preceding the month of the payment expiration date;</p> <p>IPC-FIPE 1 = IPC-FIPE corresponding to the 2nd (second) month preceding the month of the payment expiration date;</p> <p>IPC-FIPE 2 = IPC-FIPE corresponding to the third (3rd) month preceding the month of the effective date of the payment;</p> <p>IPC-FIPE 3 = IPC-FIPE corresponding to the 2nd (second) month preceding the month of the effective date of the payment;</p> <p>n = number of days from the date of the payment expiration date, exclusive, until the last day of the month of the payment expiration date, inclusive;</p> <p>m = number of days in the month of the payment expiration date;</p> <p>y = number of days counted from the first day of the month of the effective payment, till the effective payment date;</p> <p>z = number of days in the month of the effective payment.</p> <p>3.4.1 In the case of payment occur in the same month of the payment expiration date, the formula to be applied is:</p> $VDA = VDO \times \frac{(n/m)}{IPC-FIPE\ 0} \times (IPC-FIPE\ 1)$ <p>where:</p> <p>VDA = updated value of the payment in delay;</p> <p>VDO = Value in delay;</p> <p>IPC-FIPE 0 = IPC-FIPE corresponding to the third (3rd) month preceding the month of the payment expiration date / effective payment;</p> |

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| | | <p>IPC-FIPE 1 = IPC-FIPE corresponding to the 2nd (second) month preceding the month of the payment expiration date / effective payment;</p> <p>n = number of days counted from the payment expiration date, exclusive, up to the effective payment date, inclusive;</p> <p>m = number of days in the month of the payment expiration date / effective payment.</p> <p>3.5 It is expressly agreed that the EMPLOYER shall not accept duplicates, triplicates and/ or bills of exchange, and that shall only liquidate securities that have on the back, the condition "Conditioned to Verification and Compliance with the Contractual Clauses – Contract No - -----", signed by the issuer and possible endorsees.</p> <p>3.6 It will not be allowed the transference of CONTRACTOR's credits in favor of Subcontractors.</p> <p>4. COLLECTING DOCUMENTS</p> <p>4.1 The collecting documents shall be delivered directly to the Contract Manager at least ten (10) days in advance of the due date.</p> <p>4.2 In these documents, the Contract number and the reference month shall be indicated. The collecting documents shall also contain the number of the Service Order, and the number of the measurement.</p> <p>4.3 In case the CONTRACTOR presents billing documents containing mistakes, if received, the EMPLOYER will return them by document with protocol, requesting the submission of new documentation, and, in this case, all the established deadlines will be counted again, starting from the resubmission.</p> <p>4.4 If the CONTRACTOR incurs any delay in delivery of collecting documents</p> |

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| | | <p>and/ or measurement document, the EMPLOYER will postpone its expiration date at the same number of days corresponding to the period of such delay.</p> <p>4.4.1 In the event of delay in the presentation of both documents, collecting and measurement document, the expiration date will be delayed considering the document that have greater delay period.</p> <p>4.5 The invoice/Receipt of Service Provision shall be issued in accordance with the requirements of Article 219 and §§ of Federal Decree No. 3,048, of 06/05/99, and its regulations, and the CONTRACTOR shall According to the same decree and instructions of the Ministry of Social Security - Social Security Department Revenue (MPS / SRP) in force at the time of service / billing, provide with such document, copy of the GFIP - Fund Collection Guide of the Warranty for Time of Service and Information to Social Security, for the month of service, if applicable.</p> <p>4.5.1 In cases of non-compliance, discrepancy or inaccuracy in the statement of values as set out in the Decree, or applied glosses cases, the EMPLOYER will make the necessary adjustment by communicating this to the CONTRACTOR.</p> |
| Plant and Materials | 14.5(b)(i) | NOT APPLICABLE |
| | 14.5(c)(i) | NOT APPLICABLE |
| Minimum Amount of Interim Payment Certificates | 14.6 | NOT APPLICABLE |
| Delayed Payment | 14.8 | <p>NOT APPLICABLE.</p> <p>For delayed payment, it shall be observed the provisions stated on clause 14.4.</p> |

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| <p>INCLUSION OF NEW CLAUSE</p> <p>TAXES</p> | 14.16 | <p>14.16.1 The CONTRACTOR must prove the payment of taxes and other charges due, directly or indirectly, to the execution of this contract, whenever requested by the EMPLOYER, being subject to the sanctions mentioned in this instrument in case of violating this clause.</p> <p>14.16.2 Whenever by law, the EMPLOYER is responsible for the payment of taxes under this Agreement and by exclusive responsibility of the CONTRACTOR, have to answer by adds and / or other charges as a result of error in billing or failure to comply with conditions that enable the correct payment of taxes due, those updated values will be discounted from any CONTRACTOR's credits against the EMPLOYER, or by charging by issuing Debit Note.</p> <p>14.16.3 The EMPLOYER in compliance with Federal Law 8,212/91, and its further amendments, regulated by Federal Decree 3048/99, and instructions of the Secretariat of Federal Revenue of Brazil (SRFB) in force at the time of service implementation/billing, will withhold and pay the contribution to Social Security on the amounts due on account of this Agreement, in the form and periods established thereon, if applicable.</p> <p>14.16.4 All taxes and other charges due to direct or indirect result of the execution of the object of this Agreement shall be the sole responsibility of the CONTRACTOR, which shall collect them without refund. The EMPLOYER, when it is the retaining source, will deduct and collect, in the time periods set forth by the law, of the payments to make, the part that is due by the CONTRACTOR, according to the legislation in force.</p> <p>14.16.5 The CONTRACTOR shall inform, prior to the signature of the Agreement, for each item of services and Bill of Quantities, the turnover percentage of each consortium/JV member, in case the CONTRACTOR consists of a consortium/JV.</p> |

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| <p>Intellectual and Industrial Property Rights</p> <p>Inclusion of Subclauses</p> | 17.5 | <p>17.5.1 PATENT</p> <p>17.5.1.1 The EMPLOYER shall not be responsible for the improper use of content or misuse of any patented processes, software or reproduction of documents without permission of the author, relating to the services the CONTRACTOR will perform, being Contractor's responsibility any payment of indemnifications or expenses due to violations of this nature.</p> <p>17.5.1.2 The CONTRACTOR must ensure, indemnify and protect the Employer, its successors, assignees, customers and users against all liabilities, including costs, compensations, expenses, claims, actions or legal proceedings of any nature, arising out of or related to any infringement of brand, processes and patents, with respect to the provision subject of this agreement.</p> <p>17.5.1.3 The EMPLOYER will inform the CONTRACTOR, in writing, about any judicial or extra-judicial action against him, obliging the CONTRACTOR at the option of the EMPLOYER to:</p> <p>17.5.1.3.1. Defend the Employer in the most convenient way, paying any damages, losses and/or costs that may the Employer be condemned by consequence of the mentioned measures.</p> <p>17.5.1.3.2 Replace for not infringing products, the products or part of these products declared as such by court order, or modify them in order to make them non-infringing products.</p> <p>17.5.1.3.3 Ensure the Employer, the continuity and quality of the supplies under the contract.</p> |

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| | | <p>17.5.1.4 In any of the cases referred to above, the CONTRACTOR shall borne all expenses for adoption of the option seen as appropriate by the EMPLOYER as well as expenses related to the achievement of the alternatives indicated and approved by the EMPLOYER.</p> <p>17.5.1.5 The Systems / Equipment / Materials to be supplied must be completely free of control or agreement with third parties, specifically patents and "know how" that can impede the Employer to get the knowledge of the details of any technical documents, both at the level of "hardware" and basic "software" and application.</p> <p>17.5.2 COPYRIGHT AND PROPERTY RIGHTS</p> <p>17.5.2.1 The EMPLOYER will be exclusively owner of all primary materials, not limited to but including, surveys, measurements, calculation memorials, sketches, tapes, videos, CDs, photos, reports, maps, drawings, diagrams, statistical plans, memos, in other words, any documents prepared by the CONTRACTOR in the performance of the Agreement, undertaking to deliver them to the EMPLOYER whenever they are requested.</p> <p>17.5.2.2 When the final closure of the contract, the CONTRACTOR shall have delivered to the EMPLOYER any product, document and material of its property, as well as the Copyright Cession Declaration, attached to this Agreement.</p> |

| Conditions | Sub-Clause | Data |
|------------|------------|---|
| | | <p>17.5.2.3 As a result of the contract, the CONTRACTOR already gives the EMPLOYER irrevocably and indefinitely, all property rights and copyrights over the intermediate and final products resulting from the provision of the services adjusted in accordance with Law No. 9610 of 19 / 02/1998.</p> <p>17.5.2.4 It is prohibited to the CONTRACTOR, the partial or total disclosure, by any means and at any time, as well as the use of products, documents and materials stated in the contract without prior written authorization from the EMPLOYER.</p> <p>17.5.2.5 All intermediary products, documents and materials arising out of the scope of the services of the contract, will only be received by the EMPLOYER when sent by the representative of the CONTRACTOR.</p> <p>17.5.2.6 The technical documentation when elaborated by the CONTRACTOR, will be delivered to the EMPLOYER, becoming its property, except for copyrights and industrial property rights.</p> <p>17.5.2.7 The technical documentation submitted to CONTRACTOR is owned by the EMPLOYER, and all copies shall be returned, after completing the CONTRACTOR's obligations under the contract, under penalty of being held the Performance Security, mentioned in the Performance Security Clause.</p> <p>17.5.2.8 The system / equipments/ materials to be supplied must be completely free of control or agreement with third parties, patents and "know-how" that can impede the EMPLOYER to obtain knowledge of the details of the project, equipment, materials or any other object to be used or implemented by this contract.</p> |

| Conditions | Sub-Clause | Data |
|--|---|---|
| <p>General Requirements for Insurance</p> <p>Inclusion of Subclauses</p> | <p>18.1</p> | <p>18.1.1 OBLIGATIONS RELATING TO INSURANCE</p> <p>18.1.1.1 The CONTRACTOR is obliged to hire and maintain the Engineering Risks Insurance (RE) with special conditions of Civil Works mode in the indemnity guarantee (s) to Insured (s) for damage, loss or material damage in consequence of accidents of sudden and unexpected source, caused to the assets relating to this contract for any reason.</p> <p>18.1.1.2 The deadline for compliance with the item 18.1.1.1 is for until 90 days after signing the contract, being the CONTRACTOR responsible for any incidents that may occur during this period.</p> <p>18.1.1.3 The CONTRACTOR is obliged to hire and maintain, with no cost to the EMPLOYER, the fire insurance, lightning and explosion of any nature, to his property and those of the EMPLOYER, given to the Contractor for the execution of this Contract, installed or not at construction sites, as well as the Personal Accident Insurance, including death or disability, for their employees and others contracted workers acting on the object of the Agreement, and the Liability Insurance for its ground fleet and Other Risks, mobile equipment directly involved in the performance of the contract.</p> <p>18.1.1.4. Within 60 (sixty) days before the expiration of Engineering Risk insurance, the CONTRACTOR shall submit all information enabling the EMPLOYER to hire the insurance of goods already completed after the receipt of the work.</p> |

| Conditions | Sub-Clause | Data |
|---|------------|---|
| | | <p>18.1.1.5 The EMPLOYER shall stand as insured, together with the (s) Contractor (s), in the policy of Engineering Risks Insurance (RE) (clause 18.1.1.1) and as Beneficiary in the policy of Fire Insurance, Lightning and explosion (clause 18.1.1.3), solely for the values of the assets of his property made available to the CONTRACTOR for implementing the scope of this contract.</p> <p>18.1.1.6 The CONTRACTOR undertakes to bear the expenses arising from necessary repair expenses in case of occurring damages to the property of the EMPLOYER or third parties caused by the CONTRACTOR.</p> <p>18.1.1.7. The CONTRACTOR shall submit the Reports of Preventive Inspection and Indemnity Loss for the buildings bordering the site of the works whenever the analysis of the damage indicates a causal relationship between them and the Implementation works of the EMPLOYER.</p> |
| <p>Periods for submission of insurance:</p> <p>a. evidence of insurance.</p> <p>b. relevant policies</p> | 18.1 | <p>a. evidence of insurance: 14 days</p> <p>b. relevant policies : 28 days</p> |
| <p>Maximum amount of deductibles for insurance of the Employer's risks</p> | 18.2(d) | <p>The amount of deductibles shall be that one stated by either the insurers or the joint insurers.</p> <p>The maximum insured amount shall be that one stated by the employer.</p> <p>Insurance of the employer's risks shall be considered as additional clauses and shall be submitted to the approval of the insurers or joint insurers.</p> |
| <p>Minimum amount of third party insurance</p> | 18.3 | <p>The insured amount of third party insurance shall be that one evaluated by the contractor as appropriate.</p> |

| Conditions | Sub-Clause | Data |
|--|------------|---|
| Appointment of the dispute board | 20.2 | The provision: “Neither Party shall consult the DB on any matter without the agreement of the other Party.” shall be considered NOT APPLICABLE. |
| Date by which the DB shall be appointed | 20.2 | 28 days after the Commencement date |
| The DB shall be comprised of | 20.2 | Three Members |
| List of potential DB sole members | 20.2 | NOT APPLICABLE |
| Appointment (if not agreed) to be made by | 20.3 | International Chamber of Commerce (ICC) |
| Rules of arbitration | 20.6(a) | <p>a) IN THE CASE OF THE CONTRACT BEING AWARDED TO FOREIGN CONTRACTOR</p> <p>International arbitration in the institutional modality administered by one of the following institutions, as choice of the EMPLOYER:</p> <ol style="list-style-type: none"> 1. International Chamber of Commerce (ICC) 2. Chamber of Commerce Brazil-Canada (CCBC) 3. Portuguese Chamber of Commerce in Brazil (CPCB) 4. Another international chamber chosen by the EMPLOYER with the consent of the Contractor <p>The arbitration will be resolved in accordance with the chosen institution’s Regulation.</p> <p>(b) IN THE CASE OF THE CONTRACT BEING AWARDED TO A NACIONAL CONTRACTOR (BRAZILIAN COMPANY OR FOREIGN COMPANY OPERATING IN BRAZIL)</p> <p>The parties which signed this contract elect the Public Treasury of the Circuit Court of the City of São Paulo to resolve any dispute arising from this contract, excluding any other, no matter how privileged it may be.</p> |

ATTACHMENTS

1. PAYMENT INSTRUCTION – FINISHING SERVICES
2. PAYMENT INSTRUCTION – HYDRAULICS
3. PAYMENT INSTRUCTIONS – VISUAL COMMUNICATION
4. PAYMENT INSTRUCTIONS – REURBANIZATION AND LANDSCAPING
5. MODEL OF DECLARATION OF CESSION OF COPYRIGHT AND PROPERTY RIGHTS
6. MILESTONES AND WORK SCHEDULE

ATTACHMENT 1 PAYMENT INSTRUCTION – FINISHING SERVICES

The items 169 to 176 of the Bill of Quantities – Block 1 and 341 to 344 of the Bill of Quantities – Block 2 refer to the Finishing Services, in accordance with the specifications of the Quantities Table – OR's and List of Materials – LM's of each construction unit and have their measurement criteria as shown below.

1. Preliminary:

1.1 Prices include: the supply of all materials, labor and equipment, including the necessary tests for the execution of the services.

2. The Quantities Tables – OR's and the List of Materials – LM's that contain the finishing services are:

| Quantities Tables – OR' / List of Materials – LM's | Construction Units |
|---|--|
| OR-4.10.04.01-6B3-506 | Cunha Gago Maintenance Base |
| OR-4.18.00.81-6B3-506 | Vila Sônia Bus Terminal |
| OR-4.16.01.00-6B3-501 | São Paulo – Morumbi Station |
| OR-4.20.03.00 6B3-001 | Vila Sônia Station |
| OR-4.20.02.74 6B3-101 | Vila Sônia VSE – Ventilation and Emergency Exit |
| OR-4.20.06.74 6B3-001 | Edmundo Lins VSE - Ventilation and Emergency Exit |
| OR-4.20.07.73 6B3-101 | David Matarasso SE - Emergency Exit |
| LM-4.06.05.00-5B3-001 | Higienópolis-Mackenzie Station |
| LM-4.10.01.005B3-101 | Oscar Freire Station |
| LM-4.18.01.00-5B3-101 | Vila Sônia Yard - Block A – Extension of Maintenance Ditches |
| OR-4.18.02.00-6B3-506 | Vila Sônia Yard - Block B/M |
| OR-4.18.06.00-6B3-506 | Vila Sônia Yard - Block F |

3. Measurement

3.1 By Construction Unit and by Event classification, at every 10% (ten percent) of services that are effectively executed, at the Employer's discretion, according to the design(s), standard(s) and procedure(s), and provided there are no failures in the installation that might compromise their functionality or malfunction /damages.

| STAGE DESCRIPTION | (%) | Oscar Freire Station | Higienópolis-Mackenzie Station | São Paulo-Morumbi Station | Vila Sônia Station | Vila Sônia Yard - Block A | Vila Sônia Yard-Block F | Vila Sônia Bus Terminal | Vila Sônia Yard-Block B/M | Cunha Gago Maintenance Base | Vila Sônia VSE – Ventilation and Emergency Exit | Edmundo Lins VSE - Ventilation and Emergency Exit | David Matarasso SE - Emergency Exit |
|--------------------------|------------|----------------------|--------------------------------|---------------------------|--------------------|---------------------------|-------------------------|-------------------------|---------------------------|-----------------------------|---|---|-------------------------------------|
| PAINTING | (%) | 14,12% | 13,30% | 15,35% | 17,80% | 29,55% | 20,77% | 11,07% | 7,91% | 17,91% | 55,95% | 57,02% | 42,43% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| | 1/10 (%) | 1,412% | 1,330% | 1,535% | 1,780% | 2,955% | 2,077% | 1,107% | 0,791% | 1,791% | 5,595% | 5,702% | 4,243% |
| MASONRY CLOSING / | (%) | 3,59% | 3,60% | 3,36% | 24,70% | 0,00% | 7,46% | 1,51% | 5,44% | 7,47% | 0,46% | 7,08% | 0,75% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| | 1/10 (%) | 0,359% | 0,360% | 0,336% | 2,470% | 0,00% | 0,746% | 0,151% | 0,544% | 0,747% | 0,046% | 0,708% | 0,075% |
| VERTICAL CLADDING | (%) | 9,31% | 11,51% | 1,21% | 2,39% | 0,01% | 2,41% | 3,98% | 1,86% | 11,44% | 0,00% | 0,00% | 0,00% |

| | | | | | | | | | | | | | |
|---------------------------------|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| | 1/10 (%) | 0,931% | 1,151% | 0,121% | 0,239% | 0,001% | 0,241% | 0,398% | 0,186% | 1,144% | 0,00% | 0,00% | 0,00% |
| HORIZONTAL CLADDING | (%) | 18,56% | 24,74% | 18,21% | 12,14% | 19,37% | 19,18% | 56,88% | 24,86% | 26,56% | 8,49% | 4,41% | 8,05% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| | 1/10 (%) | 1,856% | 2,474% | 1,821% | 1,214% | 1,937% | 1,918% | 5,688% | 2,486% | 2,656% | 0,849% | 0,441% | 0,805% |
| WINDOWS | (%) | 30,97% | 35,02% | 46,50% | 25,33% | 51,07% | 48,47% | 16,84% | 57,39% | 33,11% | 35,10% | 31,49% | 48,77% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| | 1/10 (%) | 3,097% | 3,502% | 4,650% | 2,533% | 5,107% | 4,847% | 1,684% | 5,739% | 3,311% | 3,510% | 3,149% | 4,877% |
| MET./SANIT. CERAMIC WARE | (%) | 0,59% | 0,62% | 1,12% | 0,49% | 0,00% | 1,71% | 0,45% | 2,54% | 3,51% | 0,00% | 0,00% | 0,00% |

The Quantities Tables – OR's and the List of Materials – LM are provided in separate file attached to the bidding documents

ATTACHMENT 2 - PAYMENT INSTRUCTION – HYDRAULICS

The items 185 to 193 of the Bill of Quantities Block 1 and 353 to 361 of the Bill of Quantities – Block 2 refer to the Hydraulics Services, in accordance with the specifications of the Quantities Table – OR’s and List of Materials – LM’s of each construction unit and have their measurement criteria as shown below:

1. Preliminary:
 - 1.1. Prices include: the supply of all materials, labor and equipment, including the necessary tests for the execution of the services.
2. The Quantities Tables – OR’s and the List of Materials – LM’s that contain the Hydraulics services are:

| Quantities Tables – OR / List of Materials – LM’s | Construction Units |
|---|--|
| OR-4.10.04.01/6S5-507 | Cunha Gago Maintenance Base |
| OR-4.16.01.00/6S5-503 | São Paulo – Morumbi Station |
| OR-4.18.00.81/6S5-508 | Vila Sônia Bus Terminal |
| OR-4.18.02.00/6S5-508 | Vila Sônia Yard - Block B/M |
| OR-4.20.00.00/6S5-001 | Yard - Station Vila Sônia |
| OR-4.20.03.00 6S5-001 | Vila Sônia Station |
| OR-4.20.01.00-6S5-001 | VCA Tunnel between Yard access and NATM section |
| OR-4.20.02.00-6S5-001 | NATM Tunnel between VCA and Vila Sônia Station |
| OR-4.20.04.00-6S5-001 | Double NATM tunnel between Vila Sônia Station and VSE Edmundo Lins |
| OR-4.20.07.00-6S5-001 | Double NATM tunnel between VSE Edmundo Lins and Tímpano |
| OR-4.20.05.00-6S5-001 | Single NATM tunnel between Vila Sônia Station and VSE Edmundo Lins |
| OR-4.20.02.74 6S5-001 | Vila Sônia - VSE – Ventilation and Emergency Exit |
| OR-4.20.06.74 6S5-001 | Edmundo Lins - VSE - Ventilation and Emergency Exit |
| OR-4.20.07.73 6S5-001 | David Matarasso SE - Emergency Exit |
| LM-4.06.05.00-5S5-100 | Higienópolis – Mackenzie Station |
| LM-4.10.01.00-6S5-201 | Oscar Freire Station |
| LM-4.18.01.00-5S5-201 | Vila Sônia Yard - Block A – Extension of Maintenance Ditches |
| OR-4.18.06.00-6S5-508 | Vila Sônia Yard - Block F |

ATTACHMENT 3 - PAYMENT INSTRUCTIONS – VISUAL COMMUNICATION

The items 177 to 184 of the Bill of Quantities Block 1 and 345 to 352 of the Bill of Quantities – Block 2 refer to Visual Communication Services, in accordance with the specifications of the Quantities Table – OR’s and List of Materials – LM’s of each construction unit and have their measurement criteria as shown below

1. Preliminary:

1.1 Prices include: the supply of all materials, labor and equipment, including the necessary tests for the execution of the services.

2. The Quantities Tables – OR’s and the List of Materials – LM’s that contain the Visual Communication services are:

| Quantities Tables – OR / List of Materials – LM’s | Construction Units |
|--|--|
| OR-4.10.04.01-6B5-509 | Cunha Gago Maintenance Base |
| OR-4.16.01.00-6B5-504 | São Paulo – Morumbi Station |
| LM-4.18.00.81-6B5-001 | Vila Sônia Bus Terminal |
| OR-4.20.03.00-6B5-001 | Vila Sônia Station |
| OR-4.20.01.00-6B5-001 | VCA Tunnel between yard access and NATM section |
| OR-4.20.02.00-6B5-001 | NATM Tunnel between VCA and Vila Sônia Station |
| OR-4.20.04.00-6B5-001 | Double NATM tunnel between Vila Sônia Station and VSE Edmundo Lins |
| OR-4.20.07.00-6B5-001 | Double NATM tunnel between VSE Edmundo Lins and Tímpano |
| OR-4.20.02.74-6B5-001 | Vila Sônia VSE – Ventilation and Emergency Exit |
| OR-4.20.06.74-6B5-001 | Edmundo Lins VSE - Ventilation and Emergency Exit |
| OR-4.20.07.73-6B5-001 | David Matarasso SE - Emergency Exit |
| LM-4.06.05.00-6B5-001 | Higienópolis – Mackenzie Station |
| OR-4.10.01.00-6B5-505 | Oscar Freire Station |
| LM-4.18.01.00-6B5-101 | Vila Sônia Yard - Block A – Extension of Maintenance Ditches |
| OR-4.18.02.00-6B5-509 | Vila Sônia Yard - Block B/M |
| OR-4.18.06.00-6B5-509 | Vila Sônia Yard - Block F |

ATTACHMENT 4- PAYMENT INSTRUCTIONS – REURBANIZATION AND LANDSCAPING

The items 194 to 198 of the Bill of Quantities Block 1 and 362 to 365 of the Bill of Quantities – Block 2 refer to the Reurbanization and Landscaping Services, in accordance with the specifications of the Quantities Table – OR’s and List of Materials – LM’s of each construction unit and have their measurement criteria as shown below:

1. Preliminary:

1.1 Prices include: the supply of all materials, labor and equipment, including the necessary tests for the execution of the services.

2. The Quantities Tables – OR’s and the List of Materials – LM’s that contain the Reurbanization and Landscaping services are:

| Quantities Tables – OR/ List of Materials – LM’s | Construction Units |
|---|---|
| OR-4.10.04.01-6N3-509 | Cunha Gago Maintenance Base |
| OR-4.16.01.00-6N3-505 | São Paulo – Morumbi Station |
| OR-4.18.00.81-6N3-510 | Vila Sônia Bus Terminal |
| OR-4.20.03.00 6N3-001 | Vila Sônia Station |
| OR-4.20.02.74 6N3-101 | Vila Sônia VSE – Ventilation and Emergency Exit |
| OR-4.20.06.74 6N3-001 | Edmundo Lins VSE - Ventilation and Emergency Exit |
| OR-4.20.07.73 6N3-001 | David Matarasso SE - Emergency Exit |
| LM-4.06.05.00-6N3-001 | Higienópolis-Mackenzie Station |
| LM-4.10.01.00-6N3-101 | Oscar Freire Station |

3. Measurement:

3.1 By Construction Unit, at every 10% (ten percent) of services that are effectively executed, at the Employer’s discretion, according to the design(s), standard(s) and procedure(s), and provided there are no failures in the installation that might compromise their functionality or malfunction/damages.

ATTACHMENT 5**MODEL OF DECLARATION OF CESSION OF COPYRIGHT AND PROPERTY RIGHTS**

I..... (full name and CREA / CAU) , competent professional of the technical team of the company (name of the company)....., declare , as the author of technical object of this bid document , to cede and transfer to the construction, expansion , adaptation and reform , under the contract No. _____, my copyright and property rights as the author of technical documents discriminated on the object and detailed in scope....., and the use of the technical document that could eventually be adapted or revised for implementation in the same area, or other areas intended for this purpose, or due to the redesign of Works of Companhia do Metropolitano de São Paulo, or Secretaria dos Transportes Metropolitanos determination, in the form of expansion and application of existing legislation and the ones that come into effect in the future.

Date

Author signature

Author identification

ATTACHMENT 6 - MILESTONES AND WORK SCHEDULE

Attached on separate file

Section X. Contract Forms

Table of Forms

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Notification of Award

LETTER OF ACCEPTANCE

[letterhead paper of the Employer]

[date]

To: *[name and address of the Contractor]*

This is to notify you that your Bid dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Contract Data]* for the Accepted Contract Amount *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section X, Contract Forms, of the Bidding Documents

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made the _____ day of _____, _____, between _____ of _____ (hereinafter "the Employer"), of the one part, and _____ of _____ (hereinafter "the Contractor"), of the other part:

WHEREAS the Employer desires that the Works known as _____ 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.
 - (i) the Letter of Acceptance
 - (ii) the Letter of Bid
 - (iii) the addenda Nos _____ (if any)
 - (iv) the Particular Conditions
 - (v) the General Conditions;
 - (vi) the Specification
 - (vii) the Drawings; and
 - (viii) the completed Schedules and any other documents forming part of the contract,
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 _____ on the day, month and year specified above.

Signed by _____ (for the Employer)

Signed by _____ (for the Contractor)

Performance Security

Option 1: (Demand Guarantee)

Beneficiary: _____

Date: _____

PERFORMANCE GUARANTEE No.: _____

Guarantor: _____

We have been informed that _____ (hereinafter called "the Applicant") has entered into Contract No. _____ dated _____ with the Beneficiary, for the execution of _____ (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (),¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

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

¹ *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency(cies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

² *Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

Option 2: Performance Bond

By this Bond _____ as Principal (hereinafter called “the Contractor”) and _____] as Surety (hereinafter called “the Surety”), are held and firmly bound unto _____] as Obligee (hereinafter called “the Employer”) in the amount of _____, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Contractor has entered into a written Agreement with the Employer dated the _____ day of _____, 20 ____, for _____ in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer’s obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term “Balance of the Contract Price,” as used in this paragraph, shall mean the total amount payable by Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or
- (3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

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

Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate.

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

In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this _____ day of _____ 20 ____.

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

Advance Payment Security

Demand Guarantee

Beneficiary: _____

Date: _____

ADVANCE PAYMENT GUARANTEE No.: _____

Guarantor: _____

We have been informed that _____ (hereinafter called "the Applicant") has entered into Contract No. _____ dated _____ with the Beneficiary, for the execution of _____ (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum _____ (_____) is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ ()¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

(a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or

(b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to

¹ *The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.*

above has been credited to the Applicant on its account number _____ at _____.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the ___ day of _____, 2____,² whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date..

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

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

² *Insert the expected expiration date of the Time for Completion. The Employer should note that in the event of an extension of the time for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

Retention Money Security

Demand Guarantee

_____ [Guarantor letterhead or SWIFT identifier code]

Beneficiary: _____ [Insert name and Address of Employer]

Date: _____ [Insert date of issue]

RETENTION MONEY GUARANTEE No.: _____ [Insert guarantee reference number]

Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that _____ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Applicant") has entered into Contract No. _____ [insert reference number of the contract] dated _____ with the Beneficiary, for the execution of _____ [insert name of contract and brief description of Works] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, payment of [insert the second half of the Retention Money or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security] is to be made against a Retention Money guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ [insert amount in figures] (_____) [amount in words]¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the

¹ The Guarantor shall insert an amount representing the amount of the second half of the Retention Money or or if the amount guaranteed under the Performance Guarantee when the Taking-Over Certificate is issued is less than half of the Retention Money, the difference between half of the Retention Money and the amount guaranteed under the Performance Security and denominated either in the currency(ies) of the second half of the Retention Money as specified in the Contract, or in a freely convertible currency acceptable to the Beneficiary.

Applicant is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Applicant on its account number _____ at _____ *[insert name and address of Applicant's bank]*.

This guarantee shall expire no later than the day of, 2...², and any demand for payment under it must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

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

² *Insert the same expiry date as set forth in the performance security, representing the date twenty-eight days after the completion date described in GC Clause 11.9. The Employer should note that in the event of an extension of this date for completion of the Contract, the Employer would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*